

# Curriculum Vitae

*Giancarlo Fortino*

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## SHORT BIOGRAPHY



Giancarlo Fortino is currently Full Professor of Computer Engineering at the Department of Informatics, Modeling, Electronics and Systems (DIMES) of the University of Calabria (Unical), Rende (CS), Italy. In 2013 he took the Italian Scientific Habilitation for Full Professorship. He received a Laurea Degree (BSc+MSc) in Computer Engineering and a PhD in Computer Engineering from the University of Calabria, Italy, in 1995 and 2000, respectively. He has been a *Research Scholar* at the International Computer Science Institute (ICSI), Berkeley (CA), USA, in 1997 and 1999, and *Visiting Professor* at Queensland University of Technology (QUT), Brisbane, Australia, in 2009. He was also Assistant Professor (2001-2006) and Associate Professor (2006-2018) at University of Calabria. He was nominated *Guest Professor* in Computer Engineering of Wuhan University of Technology on April, 18 2012 (the term of appointment is three years) and in April 2015 he was nominated *Adjunct Full Professor* of Computer Engineering in the framework of High-End Foreign Experts in China (the term of appointment is three years). Since 2015 he is Adjunct Senior Research Fellow at ICAR-CNR (Italian National Research Council). In 2017 he was also nominated *High-end Expert* at HUST (Huazhong University of Science and Technology), China. In 2019, he won a CAS PIFI grant at SIAT in Shenzhen (China) covering a *Visiting Scientist* position and was also nominated Distinguished Professor of Huazhong Agricultural University (China). He is co-founder and CEO of SenSysCal S.r.l., a spin-off of University of Calabria, whose mission is the development of innovative systems and services based on Internet of Things technology for health care, energy management and structural health. He is currently the Director of the Postgraduate School (2<sup>nd</sup> Level Italian MSc) on INTER-IoT: *Integrator and Manager of IoT Systems*. His research interests include distributed computing and networks, agent systems, agent oriented software engineering, body area networks and wearable computing, wireless sensor networks, Internet of Things (including social and trust mechanism), multimedia streaming content distribution networks, GRID/Cloud computing. He is the founder and director of the SPEME (Smart, Pervasive and Mobile systems Engineering) lab that is engaged in cutting-edge research on novel programming languages, systems, protocols and architectures, and in their implementation in smart, pervasive and mobile systems and their emerging application domains. He has been involved in many research and development projects in the research/technical areas of Internet of Things, wireless sensor networks, intelligent and mobile agents, and content delivery networks. He gained funding for more than 3MEuro. In particular, he was the deputy coordinator and STPM of the EU-funded (8MEuro) H2020 project INTER-IoT (Interoperability of IoT Platforms). He is author of many papers (400+) in international journals (120+ papers in Top-level Journals including IEEE, ACM and Elsevier), conferences (majority IEEE conferences) and books (edited by Springer and IEEE Press). From the bibliometrics viewpoint, in Google Scholar he got 8500+ citations and h-index=48 (he is in the VIA-Academy TIS ranking – Top Italian Scientists). He is *High-Impact Researcher* according to Scopus-SciVal in the last 5 years 2013-18: he is ranked n. 56 in the World in the Computer Science field and N.1 in the top SciVal topic "Middleware, Internet and Sensor Networks". He is the co-founder and responsible of the Italy-China *Joint-Labs: Joint Lab on Internet of Things Technologies* established between Unical and Wuhan University of Technology on July 2012 (WUT resp. Prof. Wenfeng Li); *Joint-Lab on Internet of Things Technologies oriented to Smart Port* established between Unical and Shanghai Maritime University on Nov 2017 (SMU resp. Prof. Yongsheng Yang); *Joint-Lab on Internet of Things technologies oriented to Smart Agriculture* established between Unical and Huazhong Agriculture University on Nov 2019 (HZAU resp. Prof. Qingxi Liao). He has been awarded with the 2014 Andrew P. Sage Best IEEE SMC Transactions Paper. He is founding series editor of the IEEE Press Book Series on Human-Machine Systems and founding editor-in-chief of Springer Book Series on "Internet of Things: Technology, Communications and Computing" and currently serves as associate editor in the editorial board of IEEE Trans. on Affective Computing, IEEE Trans. on Human-Machine Systems, IEEE IoT Journal, IEEE Sensors Journal, IEEE Access, IEEE SMC Magazine, JNCA (Journal of Networks and Computer Applications, Elsevier), EAAI (Engineering Applications of Artificial Intelligence, Elsevier), INFFUS (Information Fusion, Elsevier, area editor on sensor fusion), Journal of Distributed Sensor Networks (Sage), Journal of Smart Health (Elsevier), CASM (Complex Adaptive Systems Modeling, Springer), Journal of Big Data and Cognitive Computing (MDPI), MAGS (Multi Agent and GRID Systems, IOS Press), IJOAIT (International Journal On Advances in Internet Technology, IARIA), SCPE (Scalable Computing: Practice and Experience). He organized as chair many int'l workshops and conferences (100+), was involved in a huge number of int'l conferences/workshops (500+) as IPC member, is/was guest-editor of many special issues (55+) on Content Networks, Multimedia Systems, Agent-based Computing, Wireless Sensor Networks, Body Sensor Networks, Cloud Computing in many ISI-impacted journals (e.g. IEEE Trans. on Affective Computing, IEEE Trans. on Service Computing, IEEE Trans. on Automation Science and Engineering, IEEE Trans. on Human-Machine Systems, IEEE IoT Journal, IEEE Access, INFFUS, COMNET, JNCA, FGCS, JOS, SIMPAT, MONET, CERA, CCPE, EAAI, Sensors, IJDSN, MIS, Cluster Computing, MTAP, Simulation). He is IEEE Senior Member (member of the IEEE Computer, Communications, SMC, and IoT societies), co-chair of the IEEE SMC TC on "Interactive and Wearable Computing and Devices", member of the IEEE Press Editorial Board (2017-2019), and also member of ACM. He is notably Member of the BoG of the IEEE SMC Society (term 2018-2020) and is chair of the IEEE SMC Society Italian Chapter.

## 1-PAGE CURRICULUM VITAE

- Title: Full Professor
- Office Mailing Address: Department of Informatics, Modeling, Electronics, and Systems (DIMES), Via P. Bucci, cubo 41C, 87036 Rende (CS), Italy
- Email: [g.fortino@unical.it](mailto:g.fortino@unical.it)
- Contact number: +39 349 4131595
- Current Position: Full Professor of Computer Engineering (Full-time, 100%), DIMES - University of Calabria (November 2018 to present)
- **Academic qualifications**
  - 2000 PhD in Systems and Computer Engineering, University of Calabria, Italy
  - 1995 Laurea degree (B.Sc.+M.Sc.) in Computer Engineering, University of Calabria, Italy
- **Research interests**

Body Sensor Networks, Internet of Things, Agent-based Computing
- **Research positions in other institutions**
  - 1997 and 1999 Visiting Researcher at International Computer Institute, Berkeley, CA, USA
  - 2009 Visiting Professor at Queensland University of Technology, Australia
  - 2015-17 Adjunct Professor at Wuhan University of Technology, China
  - 2017- High-end Expert at Huazhong University of Science and Technology, China
  - 2015- Adjunct Senior Research Fellow at ICAR-CNR (Italian National Research Council), Italy
  - 2019- Visiting Professor, CAS PIFI at SIAT (Shenzhen, China)
- **Selected Research projects in BSN/IoT area**
  - Deputy coordinator and STPM of the EU-funded H2020 project INTER-IoT (Interoperability of IoT Platforms, <http://www.inter-iot.eu>), 2016-2018;
  - Scientific Responsible of the Open-Source SPINE project (<http://spine.dimes.unical.it>), 2008-on going.
  - UNICAL Responsible of the bilateral Italy-China research project for mobility, entitled "Smart Personal Mobility Systems for Human Disabilities in Future Smart Cities", 2013-2015.
  - UNICAL Coordinator of EU-funded ENIAC E2SG (Energy to Smart Grid), 2012-2015.
  - UNICAL Coordinator of EU-funded FP7 CONET (Network of EXcellence in Cooperating Smart Objects), 2009-2012.
- **Bibliometrics**

He is author of many papers (430+) in international journals, conferences and books. In Google Scholar he got 8600+ citations and h-index=48 (he is in the VIA-Academy TIS ranking – Top Italian Scientists)
- **Scientific Organization Activity**
  - Founding editor of the Springer Book Series on "Internet of Things: Technology, Communications and Computing" and of the IEEE Press Book Series on Human-Machine Systems
  - Member of the editorial board of IEEE Trans. on Affective Computing, IEEE Trans. on Human-Machine Systems, IEEE IoT Journals, IEEE Sensors Journal, IEEE Access, JNCA, EAAI, INFFUS, Sensors MDPI, IJDSN, etc.
  - Chair of 100+ workshops and conferences
  - Member of TPC of 450+ int'l conferences/workshops
  - Guest-editor of 55+ special issues in renowned journals.
- **IEEE Services**
  - IEEE Senior Member
  - Co-chair of the IEEE SMC TC on "Interactive and Wearable Computing and Devices"
  - Member of the IEEE Press Editorial BoG
  - Member of the BoG of the IEEE SMC Society
  - Chair of the IEEE SMC Italian Chapter.
- **Technology Transfer and Spin-offs**
  - Founder and CEO of Sensyscal Srl – Unical spin-off, aimed at development of innovative IoT systems
  - Director of Postgraduate (Industry-oriented) II-level Master on INTER-IoT: Integrator and Manager of IoT Systems
- **Publications (main ten in the area of IoT/BSN/Wearables)**
  1. G. Fortino, R. Giannantonio, R. Gravina, P. Kuryloski, R. Jafari: Enabling Effective Programming and Flexible Management of Efficient Body Sensor Network Applications. IEEE Trans. Human-Machine Systems 43(1): 115-133 (2013) *ISI highly cited paper*
  2. H. Ghasemzadeh, P. Panuccio, S. Trovato, G. Fortino, R. Jafari: Power-Aware Activity Monitoring Using Distributed Wearable Sensors. IEEE Trans. Human-Machine Systems 44(4): 537-544 (2014)
  3. G. Fortino, S. Galzarano, R. Gravina, W. Li: A framework for collaborative computing and multi-sensor data fusion in body sensor networks. Information Fusion 22: 50-70 (2015) *ISI highly cited paper*
  4. R. Gravina, G. Fortino: Automatic Methods for the Detection of Accelerative Cardiac Defense Response. IEEE Trans. Affective Computing 7(3): 286-298 (2016)
  5. G. Smart, N. Deligiannis, R. Surace, V. Loscri, G. Fortino, Y. Andreopoulos: Decentralized Time-Synchronized Channel Swapping for Ad Hoc Wireless Networks. IEEE Trans. Vehicular Technology 65(10): 8538-8553 (2016)
  6. G. Aloï, G. Caliciuri, G. Fortino, R. Gravina, P. Pace, W. Russo, C. Savaglio: Enabling IoT interoperability through opportunistic smartphone-based mobile gateways. J. Network and Computer Applications 81: 74-84 (2017) *ISI highly cited paper*
  7. G. Fortino, W. Russo, C. Savaglio, W. Shen, M. Zhou: Agent-Oriented Cooperative Smart Objects: From IoT System Design to Implementation. IEEE Trans. Systems, Man, and Cybernetics: Systems 48(11): 1939-1956 (2018)
  8. Y. Luo, Y. Duan, W. Li, P. Pace, G. Fortino: A Novel Mobile and Hierarchical Data Transmission Architecture for Smart Factories. IEEE Trans. Industrial Informatics 14(8): 3534-3546 (2018)
  9. A. Enayet, Md. A. Razzaque, M. M., A. Alamri, G. Fortino: A Mobility-Aware Optimal Resource Allocation Architecture for Big Data Task Execution on Mobile Cloud in Smart Cities. IEEE Communications Magazine 56(2): 110-117 (2018)
  10. L. Yang, W. Li, M. Ghandehari, G. Fortino: People-Centric Cognitive Internet of Things for the Quantitative Analysis of Environmental Exposure. IEEE Internet of Things Journal 5(4): 2353-2366 (2018)

## HIGHLIGHTS OF MAIN ACHIEVEMENTS

- *Professorship.* He is Full Professor starting Nov 25, 2018. He was one of the youngest associate professors in Italy in the Computer Engineering – Computing Systems sector. He became associate professor in the 2006 at the age of 35 years old, after only 5 years he became assistant professor (2001). Usually the average age to get in the associate professor position in Italy is more than 40 years old. *In 2013, he took the Italian National Habilitation for Full Professorship.* He was also one of the youngest associate professors habilitated to the full professor position in Italy. Usually the average age to get in the full professor position (or being habilitated) in Italy is more than 50 years old. *In 2018, he won a competitive examination to be promoted Full Professor at Unical.* He was Guest Professor in Computer Engineering of Wuhan University of Technology from April 2012 to April 2015. Since 2015, he is adjunct senior researcher at ICAR-CNR (Italian National Research Council), Italy. In April 2015, he was nominated *Adjunct Full Professor* of Computer Engineering of Wuhan University of Technology in the framework of *High-End Foreign Experts in China* (the term of appointment is three years). He has been also nominated (Nov 2016) *High-end Expert* at Huazhong University of Science and Technology (HUST), Wuhan, China. He has been recently (Sept. 2019) nominated Distinguished Professor at Huazhong Agriculture University (HZAU), Wuhan, China.
- *Scientific Articles* (1997-2017). He is the (co)author more than 400 articles/publications in many areas of Computer Science/Computer Engineering: agent-based computing, wireless sensor networks, body area networks, signal processing, content distribution networks, distributed multimedia systems, workflow management systems, real-time systems, distributed measurement systems. Specifically, the number of papers published in journals (J), book/series chapters (B/SC), conferences/workshops (C/W), and authored books (B), respectively are: 160 J (140+ in top-level journals), 52 B/SC, 170 C/W (90+ in IEEE events), 3 B. Moreover, he edited 32 books (proceedings and collections) and wrote three theses (PhD, Master and Laurea degree).
- *Bibliometrics.*

He is **High-Impact Researcher** according to Scival-Scopus in the last 5 years 2013-18: he is ranked n. 56 in the World in the Computer Science field and N.1 in the research theme "Middleware, Internet and Sensor Networks". He has 11 WoS highly cited papers among which 2 hot papers.

|   | H-index | Citation Number | Sources Number |
|---|---------|-----------------|----------------|
| Google Scholar (GS)   | 48      | 8640            | >400           |
| Scopus  | 40      | 6014            | 390            |
| Web of Science (WoS)  | 31      | 3426            | 235            |
| ResearchGate (RG)<br>RG Score = 40.12<br>(>97.5% of RG members)<br>Reads = 50,075 | 40      | 6217            | 439            |

*Links to Databases:*

[Google Scholar](#)  
[SCOPUS](#)  
[ResearcherID \(WoS\)](#)  
[ResearchGate](#)

- *Leader of Research Groups and Laboratories.* He is the founder and director of the Smart, Pervasive and Mobile systems Engineering (SPEME) Laboratory (<http://labs.dimes.unical.it/speme/>). The SPEME global "mission" is the development of innovative methods and systems for engineering distributed intelligent, pervasive, mobile, multimedia and multi-sensorial systems. The SPEME Lab is therefore open to networks of public and private actors, involved in the ICT sector and its correlated multiple application domains, with specific focus on the scientific and technological context of the Internet of Things and Smart Systems of Systems, such as Smart Home, Smart Health and Smart City, in their respective expertise areas. In particular, the main aim is to define novel methodologies, techniques and frameworks for the rapid development of distributed applications. The research activity is currently focused in the following research areas: Wireless Sensor Networks, Body Area Networks, Internet of Things, Agent-based and Multi-Agent Systems, Content Delivery Networks, Vehicular Area Networks, Workflow Management Systems, IP-based Multimedia Networking. Moreover, he is the co-founder (along with Prof. Wenfeng Li) and responsible of the *Joint-Lab on IoT Technologies* established between Unical and Wuhan University of Technology on July 2012. He is also the co-founder (along with Prof. Yongsheng Yang) and responsible of the *Joint-Lab on Internet of Things Technologies oriented to Smart Port* established between Unical and Shanghai Maritime University on Nov 2017. He is also the co-founder (along with Prof. Qingxi Liao) and

responsible of the Joint-Lab on Internet of Things technologies oriented to Smart Agriculture established between Unical and Huazhong Agriculture University on Nov 2019. He is also external research advisor at KSU (Saudi Arabia).

- *Leader of Scientific Research & Development Projects.* He is leading or led University, Regional, National, Industry and International projects.

Currently he is the UNICAL responsible of the PRIN Project entitled "Fluidware" (2019-2022) funded by the Italian MIUR. The PRIN framework is the most important basic research framework in Italy.

He was the *Scientific and Technical Project Manager* and *Deputy Coordinator* of the EU H2020 INTER-IOT project (<http://www.inter-iot-project.eu/>) accepted to be funded (8.2 MEuro) by the EU commission in the call ICT-30 "interconnected smart objects". The project will start on January 1, 2016. INTER-IOT is aiming at the design, implementation and experimentation of an open cross-layer framework, an associated methodology and tools to enable voluntary interoperability among heterogeneous Internet of Things (IoT) platforms. The proposal will allow effective and efficient development of adaptive, smart IoT applications and services, atop different heterogeneous IoT platforms, spanning single and/or multiple application domains. Moreover, he is involved as responsible of workpackages in two applied research projects funded by the Calabria regional government: SmartDistr (agent-based logistics middleware) and LocubiRehab (rehabilitation platform based on Cloud-assisted body area networks).

Since 2008 he has had a University project accepted and funded each year. In the 2004, he received a project grant in the framework of Young Researcher projects from the University of Calabria. From 2002 to 2004 he was the responsible of a Bilateral Project (The COMODIN project - Cooperative Media On-Demand On the Internet) funded by the Italian Government, between University of Calabria and Universitat de Valencia, Spain. From 2004 to 2005 he was the responsible of the EU-funded AgentLink project (a project on technology transfer of agent-based computing) for the University of Calabria. Since 2007, he has been funded by Telecom Italia, the main Telco operator in Italy and one of the main International Telco operators, for the International SPINE (Signal Processing In-node Environment) project, which was launched by Telecom Italia, University of Calabria, Telecom/Pirelli WSN Berkeley Lab and University of Berkeley (CA), and is currently fully managed by his group (<http://spine.deis.unical.it>). Since 2009, he participates, as responsible of the University of Calabria, to the EU-funded CONET project that is a network of excellence promoting wireless sensor networked and cooperating objects technology. From 2011 to 2013, he has been the principal investigator and responsible of the research objective 4 (Middleware for Smart Objects) of the TETRIS Project funded by the Italian Government. He was the Unical technical project coordinator (TPC) of the FP7 ENIAC E2SG (Energy for Smart Grid) project, and also Unical responsible of workpackages in the INMOTO (related to smart objects and IoT) and AD-PERSONAS (related to e-Health) national projects funded by the Italian Government. He was the scientific responsible of four scientific/didactics projects in the framework "Messaggeri della Conoscenza (Messengers of Knowledge)", funded by the Italian Government. Moreover, in 1999, he participated as member with a grant to the research projects "Priority Encoding Transmission (PET)" funded by the National Science Foundation (NSF) at the ICSI (International Computer Science Institute), Berkeley (CA), USA.

*Overall, he gained funding for more than 4M Euros.*

- *Professional Scientific Activities.* He is very active in the professional activity of Journal editor/special issue guest editor, in the organization of workshops/conferences, in being part of the program committee of conferences and workshops, in reviewing papers for the most important international Journals of his research area. Specifically, he is EiC of Springer IoT Series and of BDCC MDPI Journal, and is in the Advisory Editorial Board of the following Int'l Journals: IEEE Transactions on Affective Computing, IEEE Transactions on Human-Machine Systems, IEEE IoT Journal, IEEE Sensors Journal, IEEE Access, International Journal of Networks and Computer Applications (JNCA), Engineering Applications of Artificial Intelligence (EAAI), Information Fusion (INFFUS), Sensors MDPI, Applied Science MDPI, International Journal of Distributed Sensor Networks, International Journal of Network Protocols and Algorithms (IJNPA), International Journal On Advances in Internet Technology (IJOAIT), International Journal on Internet and Distributed Computing Systems (IJIDCS), Complex Adaptive Systems Modeling (CASM), and International Journal of Privacy and Health Information Management (IJPHIM), Multi Agent and GRID Systems (MAGS), Scalable Computing: Practice and Experience (SCPE), (former EAB member) International Journal of Interactive Technology and Smart Education (ITSE). He organized more than 40 special issues in well-know ISI/Scopus-indexed int'l Journals on hot research topics. He also organized many int'l workshops/conferences (more than 90) and was part of the IPC of many other conferences/workshops (more than 400).

- *International Scientific Collaborations and International Agreements.* He has got many collaborations with researchers of many foreign and national research Institutions and Industry: US Universities (UC Berkeley, UT Dallas, TAMU, WSU, NYU), European Universities (UPV, UCD, TUB, TU/e, Univ. of Reading, Univ. of Derby, Imperial College, UCL, Univ. of Gdansk and Warsaw, INRIA Lille, Institut Mines-Telecom Paris, InsightCenter-Ireland, Univ. of Oulu), Australian Institutions (QUT, Univ. of Melbourne, CSIRO), Chinese Universities (WHUT, HUST, SMU, DUT, and SIAT), Moroccan Universities (Rabat and Tetuan), other extra-EU universities (KSU, COMSATS, etc.), and Industry research centers (Telecom Italia, Clarity Center Ireland, Shimmer Research, Advanticsys, Telstra, etc.). He also promoted many international agreements (>30) with most of the aforementioned universities for student/research exchange and joint PhDs. Promoted agreements were signed with Wuhan University of Technology in November 2011 and with National Higher School of IT (ENSIAS), Mohamed 5 Souissi University, Morocco, in February 2012. The signature of an agreement with University of Chile was established in 2013. The last extra-EU agreements were signed with Carleton University (Canada), New York University (USA) and SIAT (China), in 2018.
- *PhD Mentorship.* He is currently in the committee of the Doctorate in Systems and Computer Engineering (University of Calabria, Italy), of which he is vice-coordinator, and in the committee of the Doctorate in Computer Science and Telecommunications (University of Catania, Italy). He has supervised/is supervising several PhD students on different research topics, including body sensor networks, IoT, agent-based computing, wireless sensor networks, and workflow management systems.
- *Entrepreneurship activity (2010-on-going).* He is the main co-founder and CEO of SenSysCal S.r.l., a spin-off of University of Calabria, whose mission is the development of innovative systems and services based on wireless sensor networks for health care, energy management and structural health. Moreover, he holds an Italian Patent on a cuff-less, portable, sensor-based system for measuring the human blood pressure 24/7, under movement and in real-time.
- *IEEE Senior membership.* In October 2012, he was elevated IEEE senior member according to his important achievements in the computer engineering research and development field.
- *Paper Awards.*
  - o His following paper has been awarded with the *2014 Andrew P. Sage Best IEEE SMC Transactions: Fortino, G.; Giannantonio, R.; Gravina, R.; Kuryloski, P.; Jafari, R., "Enabling Effective Programming and Flexible Management of Efficient Body Sensor Network Applications," IEEE Transactions on Human-Machine Systems, vol. 43, no.1, pp.115-133, Jan. 2013. doi: 10.1109/TSMCC.2012.2215852.*
  - o His paper "Using Cloud-assisted Body Area Networks to Track People Physical Activity in Mobility" was awarded with the *Best Paper Award of EAI/ACM Bodynets 2015, Sydney, 2015.*

More details can be found in the following sections.

## RESEARCH ACTIVITY

His research activity covers the areas of distributed computing, computer networks and software engineering by using an approach that is both methodological and experimental. Moreover, he has always tried to foster interdisciplinary applied research. Since 1997, he pursued many different research lines and themes.

Currently, he is mainly focused on:

- Wearable Computing, Body Sensor Networks and Mobile Health Systems
  - o *Middleware for Body Sensor Networks (BSN)*
  - o *Cloud-assisted BSNs*
  - o *Multi-sensor data fusion algorithms in BSN.*
  - o *Big Data analysis for Mobile Health Systems*
- Wireless Sensor Networks
  - o *Middleware for wireless sensor and actuator networks (WSAN)*
  - o *Energy efficient protocols for wireless sensor networks (WSN) at Network and MAC layers*
  - o *Mobile agent platform for WSN*
  - o *Human-centered WSN*
- Internet of Things
  - o *Middleware for cooperating smart objects*
  - o *IoT Interoperability, Integration and Interconnection*
  - o *Autonomic and Cognitive IoT*
  - o *Networks of Aerial-Terrestrial Smart Drones*
  - o *Integrating Cyberphysical Smart Objects with Digital Libraries*
  - o *Social and Trust Mechanisms for IoT systems*
- Agent-based Computing and Engineering
  - o *Agent Oriented Software Engineering (AOSE)*
  - o *Agent-based Modeling and Simulation (ABMS)*
  - o *Multi-agent Foraging based on Stigmergy approach*
  - o *Interoperability of mobile agent systems*
  - o *Agent-based and Multi-Agent Applications*
- Content Distribution Networks
  - o *Synchronous collaborative streaming services supported by CDNs*
  - o *CDN architectures based on P2P, Grid and Agent technologies*
  - o *Multimedia broadcast systems for infrastructural vehicular area networks*
- Business Process Management Languages and Systems
  - o *Methodologies for risk-aware business process management*
  - o *Distributed workflow management systems*
  - o *BPM querying languages*
- Large-scale Distributed Computing
  - o *Distributed mechanisms for enabling federations of Cloud Systems*
  - o *Large-scale distributed data mining*
  - o *Epidemic protocols*
- Molecular Communications
  - o *Security in Nanonetworks*
  - o *Molecular data transmission mechanisms*

The aforementioned research also is developing and is maintaining the following open-source software frameworks:

- SPINE (Signal Processing In-Node Environment): <http://spine.deis.unical.it>
- BMF (Building Management Framework): <http://bmf.deis.unical.it>
- BodyCloud (Integration BSN and Cloud Computing): <http://bodycloud.dimes.unical.it>
- ACOSO (Agent-based Cooperating Smart Objects): <http://acoso.dimes.unical.it>
- AirGround (Coordination of Aerial/Terrestrial Smart Drones): <http://airground.dimes.unical.it>
- ELDATool (Event-driven Lightweight Distilled Statecharts Agents Tool): <http://eldameth.deis.unical.it>

Past research was focused on:

- Actor-based Computing and Systems: Programming Frameworks and Discrete Event Simulation.
- Distributed Multimedia Systems: Models, Frameworks, Methodologies and Applications.
- Real-Time Systems: Methodologies and Frameworks.
- Distributed Measurement Systems: Programming Paradigms and Applications.



## RESEARCH/TECHNICAL PROJECTS

He participated to national, international, and local research projects both as project member and project leader. In particular:

- 2019-2021. PRIN Project (Basic Research funding scheme) funded by MIUR (Italian Ministry of Instruction, University and Research). Title of the Project: FluidWare. He is the responsible of the University of Calabria partner. The aim is to create a new paradigm (formal models, middleware, validation tools) for the development of next-generation IoT systems.
- 2019–2021. International research consultant, research project "Driver Distraction Management System in KSA Using Sensor-Cloud Technology " at King Saudi University (Scientific Responsible: Dr. Atif Mohammad Alamri) funded by National Plan for Science, Technology and Innovation (NPST) of Saudi Arabia.
- 2020-2021. CAS (Chinese Academy of Science) PIFI (President’s International Fellowship) for Visiting Scientist at SIAT (Shenzhen Institute for Advanced Technologies). Project name: “Body-Sensor-Network based real-time early warning mechanism for cardiovascular vulnerable plaque rupture event”.
- 2019. EPIC (<https://www.epicproject.eu/>) Expert Project for Research Exchange with the National University of Singapore (NUS) focused on "Wearable EEG-centred Body-Sensor-Network for the monitoring and recovery training of stroke people with deep learning".
- 2018-2020. Member of National Project MISE (Italian Ministry of Economic Development) – S2BDW: Smarter Solutions in the Big Data World. Research & Development Activity: analysis and design of a smart lighting system platform.
- Jun 2018 – May 2020 (*on-going*). He participates in the PON COGITO funded by the Italian Government – MIUR. COGITO (A COGnitive dynamic sysTEM to allOW buildings to learn and adapt) aims at delivering a cognitive platform with associated application to build “Cognitive Buildings” where ambient assisted livings at home and more generally in buildings can be automatically supported by cognitive environments and ecosystems of cooperating objects. Specifically, he will coordinate two activities: a) definition of hw/sw interfaces between wearable sensors and the overall platform; b) definition of new algorithms for multi-user activity recognition.
- Jan 2016 - Dec 2018 (*on-going*). He is the deputy coordinator, STPM (Scientific and Technical Project Manager) and the scientific responsible of the University of Calabria of the EU H2020 INTER-IOT project (n. 687283) funded (7.3 MEuro) by the EU commission in the call ICT-30 "interconnected smart objects". INTER-IOT is aiming at the design, implementation and experimentation of an open cross-layer framework, an associated methodology and tools to enable voluntary interoperability among heterogeneous Internet of Things (IoT) platforms. The proposal will allow effective and efficient development of adaptive, smart IoT applications and services, atop different heterogeneous IoT platforms, spanning single and/or multiple application domains.
- Sept 2017 – on-going. He is the responsible of Sensyscal participating to Hybrid Cloud project funded by Calabria Region in the framework of POR (Research and Development). The aim is to build a new framework to efficiently manage hybrid clouds for manipulating IoT-generated big data streams.
- Oct 2016 – Oct 2019 (*on-going*). Erasmus+ Project: “Boosting Innovation in Curricula Development of IT Programs in Palestine (BIT-PAL)”. He is the scientific and didactic responsible of Unical. BIT-PAL project aims to develop and to improve the curricula of IT programs in the partner Palestinian universities participating in this project. This development will enhance the teaching methodologies among teaching of IT courses that will consequently influence the students' ability to use the IT tools not only after their graduation, but also during their study.
- Jan 2008 - *on-going*. He is the responsible of the open-source SPINE project (<http://spine.deis.unical.it/>), which was established by Telecom Italia Labs (Italy) with support from University of Berkeley (California), University of Dallas (Texas) and the Pirelli/Telecom WSN laboratory (Berkeley). From 2008 to 2012, Prof. Fortino received three research grants (75 KEuros) from Telecom Italia to develop the SPINE project.
- Jan 2012 – *on-going*. He participates to the “Polo della Salute Calabria” (Calabria Health-Care Research Regional Institution) as responsible of the SenSys laboratory providing services and technology on Body Sensor Networks.
- May 2015 – Apr. 2017. International research consultant, research project "Seamless Integration of Body Sensor Networks with Cloud Computing for Pervasive Healthcare" at King Saudi University (Scientific Responsible: Dr. M.M. Hassan) funded by National Plan for Science, Technology and Innovation (NPST) of Saudi Arabia (code: 12-INF2885-02).

- *Jul 2014 - Dec 2015.* He was the UNICAL responsible of workpackage 4 of the SmartDistr project, funded by the Calabria region. The project aim is to develop a distributed platforms and related tools for smart distribution and logistics. Specifically, WP4 focuses on the design, implementation and testing of an agent-based middleware for mobile computing supporting smart transportation.
- *Mar 2014 - Dec 2015.* He is the UNICAL responsible of the Sensys lab in the LocubiRehab Project, funded by the Calabria region. The project aims at developing innovative health-care solutions for rehabilitation based on robots and body sensor networks. In particular, his group focuses on the development of a rehabilitation solution based on wearable sensors and cloud computing.
- *Jan 2013 – Dec 2015.* He is UNICAL responsible of the bilateral Italy-China research project for mobility, entitled “Smart Personal Mobility Systems for Human Disabilities in Future Smart Cities”. The Chinese group is led by Prof. Wenfeng Li, Wuhan University of Technology. The main aim is the development of a distributed hw/sw platform for supporting disabled people in mobility.
- *Jan 2013 – July 2015.* He was the DIMES/UNICAL responsible of activity 2.4.4 on “Discovery of Smart Objects for Tourism” in the INMOTO project funded by the Italian Government. The main aim of the research activity is to define a suite for the management of physical/logical smart objects in the Tourism application domain.
- *May 2013 – May 2015.* He was the UNICAL responsible of the Social Innovation AD-PERSONAS project funded by the Italian Government. The main aim is to define a cloud-based infrastructure for body area networks management in human-centered domains such as (mobile) e-Health, e-fitness/sport, e-Sociality, e-Emergency.
- *Nov 2013 – Apr 2015.* Responsible of the ARUE Project “BodyCloud: Methods and Architecture for the Integration of Cloud Computing and Body Sensor Networks”. Funding for postdoc grants.
- *Jan 2013 – Dec 2014.* He was the DIMES Scientific Responsible of four joint didactics/research projects in the framework of "Messaggeri della Conoscenza" funded by the Italian Government. The projects have a twofold goal: (i) the delivery of advanced scientific knowledge to master-level students in Computer/Telco Engineering through courses tenured by foreign professors at the DIMES/UNICAL and (ii) research activity supervised by Prof. Fortino and carried out by selected students at the laboratories of the foreign professors.
- *Apr 2012 – October 2015.* He is UNICAL co-responsible (Project Technical Coordinator) of the ENIAC E2SG (Energy to Smart Grid) project funded by EU Commission. Specifically, he coordinates the Task 2.2b of WP2 (Grid-sensing/metering & communication) on the design and implementation of an Intra-Grid Management Framework (IGMF) based on Wireless Sensor and Actuator Networks. E2SG took the ECSEL Award.
- *Jan 2012 – Jul 2015.* He participated in the PON “Ambiente” SILA Project (Research Project on Environment), funded by the Italian Government. Specifically, he supported the coordination of the LIRA laboratory, supervising the development of services based on wireless sensor networks and cloud computing.
- *Jan 2011 – Dec 2013.* He participated in the TETRIS Project – TETRA Innovative Open Source Services, funded by the Italian Government (PON 01-00451). Specifically, he coordinated the WP4 on the development of an intelligent middleware for programming smart objects.
- *Dec 2009 - Nov 2012.* As associate member and UNICAL responsible he participated to the CONET project, the Cooperating Objects Network of Excellence, which is a EU-funded project under ICT, FP7. The CONET project aims at building a strong community in the area of Cooperating Objects (the Internet of Things), including research, public sector and industry partners from the areas of embedded systems, pervasive computing and wireless sensor networks.
- *Jan 2010 - Dec 2011.* He participated to the OpenKnowTech Project funded by Italian Government.
- *Jan 2008 - Jan 2010.* He participated to the PROMIS Project funded by Italian Government.
- *2011.* Responsible of Unical Project (ex-60%) on “Methodologies, tools, and systems for continuous and real-time monitoring of assisted livings based on wearable computers”.
- *2010.* Responsible of Unical Project (ex-60%) “Novel techniques for programming wireless sensor networks for building monitoring”.
- *2009.* Responsible of Unical Project (ex-60%) “Task-oriented paradigms and architectures for programming wireless sensor networks”.
- *2008.* Responsible of Unical Project (ex-60%) “Methods based on the Model-driven Development paradigm for Wireless Sensor Networks”

- *Jan 2002 - Sep 2004.* He was responsible of a research project (IT-592) with the Universidad Politecnica de Valencia (Spain) in the framework of the "Italy/Spain Integrated Actions". The project was funded by the MIUR (the Italian Ministry of University and Research). The Spanish research group with which the collaboration was established was coordinated by Prof. Carlos E. Palau of the telecommunication department of the Universidad Politecnica de Valencia. The research project, entitled "Development of a cooperative and content-enriched media on-demand system for e-Learning and e-Entertainment on the Internet" was aimed at defining and implementing a cooperative media on-demand system, and related application-level protocols, based on content distribution networks (CDN), named COMODIN (Cooperative Media On-Demand on the INternet).
- *Sep 2003 - Sep 2004.* He was responsible of a research project funded in the framework of the initiative "Research Projects for Young Researchers". The project, entitled "Development of a P2P infrastructure based on mobile agents for next-generation Internet applications" was aimed at defining and prototyping a software infrastructure whose nodes are organized according to a P2P model whereas the distributed computing is carried out by mobile agents. The objective of the infrastructure is to support novel, dynamic and self-organizing applications and services such as the Virtual Private Web.
- *Jun 2004 - Dec 2005.* He was the contact point for DEIS-Unical (member 091) of the European co-ordination action AgentLink III which was aimed at supporting and promoting research activities on agent-based computing. In particular, his research activity was carried out within the TFG (Technical Forum Group) AOSE (Agent Oriented Software Engineering) which was aimed at defining agent-oriented methodologies on the basis of a generalized meta-model of multi-agent system obtained through the integration of method fragments coming from available agent-oriented methodologies.
- *Jan 2003 - Dec 2005.* He participated as member to the research project "M.ENTE: Management of Integrated Enterprise" (PROGETTO PON: N° 12970/AGROINDUSTRIA/PON), funded by the MIUR. The project was aimed at analyzing, designing, developing and experimenting with a pervasive system supporting remote control and management of productive, organizational, and managerial processes of enterprises operating in the agricultural area of Calabria. In particular, his research activity was focused on the design and implementation of an agent-based workflow management systems (WFMS) supporting the system coordination.
- *Mar 1999 - Jul 1999.* He participated as member to the research projects "Priority Encoding Transmission (PET)" funded by the National Science Foundation (NSF) at the ICSI (International Computer Science Institute), Berkeley (CA), USA. He collaborated with the project responsible and leader of the network group Dr. Andres Albanese to the writing of the final technical report of the project as well as to some proposals of extensions of the PET-based multimedia tools developed in previous phases of the project.
- *Jan 1998 - Dec 1999.* He participated as member of the DEIS Research Unit (UR-DEIS) to the research project (MURST ex-40%) "Metodologie di progetto di sistemi ad alte prestazioni per applicazioni distribuite (MOSAICO) - Design methodologies of high-performance systems for distributed applications". The project coordinator was Prof. Luciano Lenzini whereas the responsible of the UR-DEIS was Prof. Libero Nigro. His research activity was focused within the following research theme: "Actor Systems for real-time and simulation in distributed systems".
- *Jan 2000 - Dec 2001.* He participated as member of the DEIS Operating Unit to the research project "Development of virtual laboratories based on actors and on the Internet multimedia layer" coordinated by the Prof. Stefano Caselli (national coordinator) and Prof. L. Nigro (local coordinator) in the context of the projects CNR-Agenzia2000: CNRC002FE3\_004, METODOLOGIE E STRUMENTI PER LABORATORI VIRTUALI DISTRIBUITI - Linguaggi e tecnologie multimediali e realtà virtuali.
- *1998-2007,* Giancarlo Fortino has always participated as member of DEIS research units to annual/biennial research projects (ex-60% MURST) funded by the University of Calabria.

## RESEARCH PERIODS AND POSITIONS ABROAD\*

The most significant research periods (>1 month) he spent in foreign scientific institutions are reported in the following by briefly describing the research activities carried out.

- Jan 2019- on-going, He is CAS (Chinese Academy of Science) PIFI (President's International Fellowship) **Visiting Scientist** at SIAT (Shenzhen Institute for Advanced Technologies). He will spend 1-month a year at SIAT to give talks/seminars, supervise PhD students and carry out joint research on the approved project.

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\* Only overall periods equal or greater than one month are reported.

- Nov 2016-*on-going*. He is **High-end Expert** at HUST (Huazhong University of Science and Technology), Wuhan, China. He will spend 1-month a year at Huazhong University of Science and Technology to give courses, talks/seminars, supervise PhD students and carry out joint research.
- *May 2015-May 2018*. He is **Adjunct Professor** of Wuhan University of Technology in the framework of *High-End Foreign Experts in China*. He will spend 1-month a year at Wuhan University of Technology to give courses, talks/seminars, supervise PhD students and carry out joint research.
- *May 2012- on-going*. He was **Guest Professor** of Wuhan University of Technology. During this period he spent more than one month (two weeks a year) at Wuhan University of Technology to give talks/seminars, supervise PhD students and carry out joint research with the Prof. Li's group.
- *Jul 2009 – Oct 2009*. He was **Visiting Professor** in the Business Process Management (BPM) group of the Faculty of Science and Technology of the Queensland University of Technology (QUT), Brisbane, Australia. In particular, he contributed to launch a project on the risk management in BPM.
- *Jan 2003-Sep 2004*. During this period he spent almost two months at the Universidad Politecnica de Valencia in the context of the COMODIN project (see *Projects* section). In particular, he mainly focused on the management of the project together with Prof. Carlos E. Palau.
- *Feb 1999-Jul 1999*. He was **Visiting Researcher** (supported by a grant) at the ICSI, Berkeley (CA), USA, working in the NSF project PET (Priority Encoding Transmission). In particular, his research activity was mainly focused on the study and the application of the PET technique for the development of robust media streaming systems over MBone.
- *Mar 1997-Nov 1997*. He was **Research Scholar** in the Network Group of the International Computer Science Institute (ICSI), Berkeley (CA), USA. In particular, his research activity was mainly focused on the definition of application-level protocols and innovative architectures for the transmission, control and management of multimedia streams over Internet MBone.

## SCIENTIFIC COLLABORATIONS

He established the following scientific collaborations with Italian and foreign research institutions.

- From 1997 to 1999, he collaborated with Dr. Andres Albanese (leader of the Network Group at the International Computer Science Institute, Berkeley, CA, USA) on research activities related to distributed multimedia systems.
- Since 2001, he collaborates with Prof. Carlos E. Palau (Universidad Politecnica de Valencia, Spain) on research activities related to CDNs, multimedia systems, WSN and currently IoT.
- From 2002 to 2006, he collaborated with Dr. Eugenio Zimeo (Università del Sannio, Italy) on research activities related to agent-based distributed computing and agent-oriented software engineering.
- Since 2002, he collaborates with Dr. Carlo Mastroianni (ICAR/CNR, Cosenza, Italy) on research activities related to cooperative playback control protocols and media streaming.
- Since 2003, he collaborates with Dr. Massimo Cossentino (ICAR/CNR, Palermo, Italy) on research activities related to agent-oriented software engineering, also in the context of the FIPA Methodology TC and AOSE TFG of AgentLink III.
- Since 2006, he collaborates with Dr. Giuseppe di Fatta (Associate professor and Chair of Computer Science Dept. at the University of Reading, UK) on research activities related to distributed systems and multi-agent systems for distributed data mining and computing.
- From 2007 to 2012, he collaborated with Dr. Marco Sgroi (director of the Telecom/Pirelli WSN Lab, Berkeley, CA, USA) on research activities related to wireless sensor networks focusing on the activity monitoring of individuals for health care.
- Since 2008, he collaborates with Dr. Fabio Luigi Bellifemine (director of the WSN research area of Telecom Italia Labs, Italy) and Roberta Giannantonio (Responsible of SPINE) on the SPINE project.
- Since 2008, he collaborates with TDGroup S.p.A. on research & development themes focused on wireless (body) sensor networks and related technologies.
- Since 2009, he collaborates with Prof. Adam Wolisz, leader of the network group at the Technical University of Berlin, on emotional recognition through signal processing in-node frameworks for body sensor networks.
- Since 2009, he collaborates with Dr. Antonio Ruzzelli, lecturer at the University College of Dublin, on frameworks for IP-open wireless sensor networks with applications for monitoring building energy.
- Since 2009, he collaborates with Dr. Marcello La Rosa, senior lecturer at the Queensland University of Technology (Brisbane, Australia), on risk mitigation in business processes in the context of workflow management systems.
- Since 2009, he collaborates with Prof. P. Manzoni, associate professor at Universidad Politecnica de Valencia, on the definition of techniques for the delivery of contents in Vehicular Area Networks.
- Since 2010, he collaborates with Dr. Marcin Paprzycki and Dr. Maria Ganzha, System Research Institute Polish Academy of Sciences, Poland, on multi-agent systems.

- Since 2010, he collaborates with Dr. Muaz Niazi, professor at COMSATS Institute of IT, Islamabad Pakistan, on agent-based modeling and simulation.
- Since 2010, he collaborates with Dr. Roozbeh Jafari, Assistant Professor at UT Dallas, USA, on Wireless Body Sensor Networks.
- Since 2011, he collaborates with Prof. A. Liotta, professor at Technical University of Eindhoven, on autonomic systems.
- Since 2011, he collaborates Dr. Yiannis Andreopoulos, University College London (UK), on definition, analysis and implementation of innovative MAC-level communication protocols in wireless sensor networks.
- Since 2011, he collaborates with Prof. Wenfeng Li, professor at Wuhan University of Technology (China), on collaborative wireless sensor networks and Internet of Things.
- Since 2011, he collaborates with Prof. Mohammad Essaaidi, professor at University of Abdelmalek Essaidi (Tetuan) and Director of National Higher School of IT (ENSIAS) – Rabat, Morocco, on wireless sensor networks technologies.
- Since 2011, he collaborates with Prof. Costin Badica, University of Craiova (Romania), on multi-agent systems.
- Since 2012, he collaborates with Prof. Sergio Ochoa, University of Chile (Chile), on the integration of mobile computing and body sensor networks.
- Since 2013, he collaborates with Prof. Jun Suzuki, University of Massachussets (Boston, USA), on the integration of CyberPhysical Systems and Cloud Computing.
- Since 2013, he collaborates with Prof. Athanasios V. Vasilakos, Dept. of Computer and Telecommunications Engineering, University of Western Macedonia, Greece, on the integration of Body Area Networks and Cloud Computing, and molecular communications.
- Since 2014, he collaborates with Dr. Hassan Ghasemzadeh, Dept. of Computer Science and Electrical Engineering, Washington State University, Pullman, Seattle, USA, on the Multi-sensor data fusion and pattern recognition algorithms in Body Sensor Networks.
- Since 2015, he collaborates with Dr. Mohammad Mehedi Hassan, Information Systems Department, College of Computer and Information Sciences, King Saud University, Riyadh, KSA, on Cloud Computing and IoT Technologies.
- Since 2015, he collaborates with Dr. Valeria Loscri, INRIA Lille-Nord Europe, FUN Research Lab, France, on Body Area NanoNetworks.
- Since 2015, he collaborates with Prof. Min Chen, EPIC group, Huazhong University of Science and Technology (HUST), Wuhan, China, on the integration of Body Area Networks, Emotion Recognition, Cloud Computing, and Big Data.
- 2015-, Imperial College of London (UK), Prof. Guang-Zhong Yang, Body Sensor Networks and Affective Computing
- Since 2016, he collaborates with Prof. Zhelong Wang, Dalian University of Technology (DUT), Dalian, China, on activity recognition algorithms for Body Area Networks.
- Since 2016, he collaborates with Dr. Yin Zhang, Zhongnan University of Economics and Law (China), on emotion-aware systems.
- Since 2016, he collaborates with Prof. Mengchu Zhou, New Jersey Institute of Technology (USA), on next-generation Internet of Things services modeling and validation.
- 2017-, University of Bologna (Cesena), Prof. Mirko Viroli, Novel Paradigms for IoT Modeling and Simulation
- 2017-, Shanghai Maritime University (China), Dr. Xiuwen Fu, Prof. Yongsheng Yang, Energy efficient algorithms for Wireless Sensor Networks and IoT communications
- Since 2017, University Mediterranea of Reggio Calabria (Italy), Prof. Domenico Rosaci and Prof. Giuseppe Sarnè, Trust Methods in IoT.
- 2017-, Universidade Federal do Rio de Janeiro (Brazil), Prof. Flavia Delicato, Dr. Claudio Miceli de Farias, Multi-sensor Fusion in Wireless Sensor Networks and IoT
- 2017-, Shenzhen Institutes of Advanced Technology, Shenzhen, (China), Prof. Ye Li, Wearable networked devices and Big Data Healthcare
- 2018-, New York University (USA), Prof. Masoud Ghandehari, Urban Computing and Science
- 2018-, National University of Singapore (Singapore), Dr. Hongliang Ren, Wearable Medical Sensors and Computing
- 2019-, Huazhong Agriculture University (Wuhan, China), Prof. C. Huang and Dr. Lin Yang, IoT technologies for Smart Agriculture

## RESEARCH-ORIENTED PROFESSIONAL ACTIVITY

He is founder and editor-in-chief of the Springer Book Series on “Internet of Things: Technology, Communications and Computing”. *Scopus indexed*.

He is founder and series editor of the IEEE Press Book Series on “Human-Machine Systems” \*\*\*new series\*\*\*.

He is co-founder and co-editor-in-chief (EiC: Dr. Kelvin Wong) of the Springer Journal on Advanced Bionics, Biokinetics and Biocybernetics.

He is co-Editor-in-Chief (EiC: Prof. Min Chen) of Big Data and Cognitive Computing, MDPI (<http://www.mdpi.com/journal/BDCC>)

### Member of Advisory Editorial Board of International Journal

1. IEEE Transactions on Affective Computing (TAFCC-CS); *ISI indexed*.
2. IEEE Transactions on Human-Machine Systems (THMS); *ISI indexed*.
3. IEEE IoT Journal; *ISI indexed*.
4. IEEE Sensors Journal; *ISI indexed*.
5. IEEE Access; *ISI indexed*.
6. IEEE SMC Magazine; *ISI indexed*.
7. IEEE Open Access Journal of Engineering in Medicine and Biology (OJEMB)
8. Information Fusion (INFFUS), Elsevier; *ISI indexed. Sensor Fusion Area Editor*.
9. International Journal of Networks and Computer Applications (JNCA), Elsevier; *ISI indexed*.
10. Engineering Applications of Artificial Intelligence (EEAI), Elsevier; *ISI indexed*.
11. Sensors, MDPI: Section Sensor Networks; *ISI indexed*.
12. International Journal of Distributed Sensor Networks (IJDSN), SAGE Publishing; *ISI indexed*.
13. Applied Sciences, MDPI: Section "Computer Science and Electrical Engineering"; *ISI indexed*.
14. Multi Agent and GRID Systems (MAGS), IOS Press; *Scopus indexed*.
15. Complex Adaptive Systems Modeling (CASM), Springer; *Pre-ISI and Scopus indexed*.
16. Smart Health, Elsevier; Scopus indexed. (since 2016).
17. Scalable Computing: Practice and Experience (SCPE), Scientific International Journal for Parallel and Distributed Computing - ISSN: 1895-1767; *Scopus indexed*.
18. Advances in Distributed Computing and Artificial Intelligence Journal (ADCAIJ), ISSN: 2255-2863 <http://adcaij.usal.es>.
19. International Journal of Network Protocols and Algorithms, Macrothink Institute (ISSN 1943-3581);
20. International Journal On Advances in Internet Technology (IJOAIT), IARIA;
21. International Journal on Internet and Distributed Computing Systems (IJIDCS) – ISSN: 2219-1887 (Online Version); 2219-1127 (Print Version);
22. International Journal of Interactive Technology and Smart Education (ITSE), Emerald Publishing; (2003-2013)
23. International Journal of Privacy and Health Information Management (IJPHIM), IGI Global (until 2015).

### Co-editor of special issues

1. “Learning-based Edge Computing Services”, *IEEE Network Magazine*, GEs: Prof. Min Chen, Prof. Haiyang Wang, Prof. Kai Hwang, Prof. Giancarlo Fortino, Dr. Jeungeun Song, Prof. Limei Peng, Prof. Joze Guna.
2. “Resilient Control in Large-Scale Networked Cyber-Physical Systems, IEEE/CAA Journal of Automatica Sinica. Guest Editors: Xianghui Cao, Southeast University, Nanjing, China ([xhcao@seu.edu.cn](mailto:xhcao@seu.edu.cn)), Giancarlo Fortino, University of Calabria, Italy ([g.fortino@unical.it](mailto:g.fortino@unical.it)), Giuseppe Franzè, University of Calabria, Italy ([giuseppe.franze@unical.it](mailto:giuseppe.franze@unical.it)), Giuseppe Maria Luigi Sarnè, University Mediterranea of Reggio Calabria, Italy ([sarne@unirc.it](mailto:sarne@unirc.it)), Zhen Song, Department of Corporate Technology (CT), Siemens ([zhen.song@siemens.com](mailto:zhen.song@siemens.com))
3. “IoT modelling and simulation in smart-anything computation at the Edge”, SIMPAT, GEs: R. Montella, H. Karatza.
4. “Pushing Artificial Intelligence to Edge: Emerging Trends, Issues and Challenges”, Engineering Applications of Artificial Intelligence, GEs: M.M. Hassan, M. Zhou, M. Pathan, S. Karnouskos.
5. "Internet of Things, Big Data and Smart Systems", Sensors MDPI, GEs: Prof. W. Shen, Prof. A Liotta, et al.: [https://www.mdpi.com/journal/sensors/special\\_issues/IOTBigData](https://www.mdpi.com/journal/sensors/special_issues/IOTBigData)
6. “Special Collection on Security and Privacy in Edge Computing”, IJDSN, GEs: Deze Zeng, China University of Geosciences, Wuhan, China, Zhangjie Fu, Nanjing University of Information Science and Technology, China, Cong Wang, City University of Hong Kong, Hong Kong, Liran Ma, Texas Christian University, USA. <https://journals.sagepub.com/page/dsn/collections/special-issues/security-and-privacy-in-edge-computing>
7. “Deep learning in radiology - from image analysis to image reconstruction”, Computer Methods and Programs in Biomedicine, GEs: Kelvin KL Wong, Jimmy Zhijua Liu.
8. “Research Topic: Cardiovascular Physiology and Medical Assessments: Physics and Engineering Perspectives”,

- Frontiers in Physics, Frontiers in Physiology, Frontiers in Molecular Biosciences, GEs: Dhanjoo Ghista, Kelvin Kian Loong Wong
9. "Wireless Body Area Networks for Health Applications", Sensors MDPI, GEs: Dr. Lorenzo Mucchi, Matti Hämäläinen, Massimiliano Pierobon, Diep Nguyen.
  10. "Wearable Electronics, Smart Textiles and Computing", Sensors MDPI, GEs: Wendong Xiao, Dongyi Chen, Ting Zhang, Li Liu
  11. "Computational Biostatistics and Biometrics in Internet-of-Medical-Things", Future Generation Computer Systems, GEs: Kelvin KL Wong, Jimmy Zhihua Liu, Simon Fong.
  12. "Wireless Body Sensor Networks", Wireless Communications and Mobile Computing, GEs: David Naranjo-Hernández, Javier Reina-Tosina, Giancarlo Fortino, Guglielmo Frigo.
  13. "Artificial Intelligence and Cognitive Computing for Communication and Network", IEEE Access, GEs: Y. Zhang et al.
  14. "Smart Sensors for Internet of Medical Things in Clinical Domains", IJDSN, GEs: Wanqing Wu, Kelvin KL Wong, Dhanjoo N. Ghista, Simon Fong.
  15. "Advances in Multi-Sensor Fusion for Body Sensor Networks: Algorithms, Architectures, and Applications II", Information Fusion, GEs: GZ Yang, Y. Li, C. Poon, M. Yuce, H. Gasemzadeh.
  16. "Big Social Data and Urban Computing", Information Systems. Co-Guest Editors: Jonice Oliveira (Universidade Federal do Rio de Janeiro, Brazil), Claudio Miceli (Universidade Federal do Rio de Janeiro, Brazil), Prof. Esther Pacitti (Université Montpellier, France).
  17. Special Section on "Wearable Computing based on Body Sensor Networks", IEEE Systems, Man & Cybernetics Magazine.
  18. Special Issue on "Wireless Body Area Networks – Best Papers from Bodynets 2018", International Journal on Wireless Information Networks. Co-Guest Editors: Matti Hämäläinen, University of Oulu, Finland; Jari Iinatti, University of Oulu, Finland; Lorenzo Mucchi, University of Florence, Italy; Carlos Pomalaza-Raez, Purdue University, USA; Prof. Daisuke Anzai, Nagoya Institute of Technology, Japan.
  19. Special Issue on "Wireless Body Area Networks – Best Papers from Bodynets 2018", IEEE Access. Co-Guest Editors: Matti Hämäläinen, University of Oulu, Finland; Jari Iinatti, University of Oulu, Finland; Lorenzo Mucchi, University of Florence, Italy; Carlos Pomalaza-Raez, Purdue University, USA; Prof. Daisuke Anzai, Nagoya Institute of Technology, Japan. *Accepted*.
  20. Special Issue on "Pervasive Intelligence and Computing", Sensors MDPI, [http://www.mdpi.com/journal/sensors/special\\_issues/Pervasive\\_Intelligence\\_Computing](http://www.mdpi.com/journal/sensors/special_issues/Pervasive_Intelligence_Computing). Co-Guest Editors: Jianhua Ma, Laurence T. Yang, Flavia Delicato, Pietro Manzoni. *on-going*.
  21. Special Issue on "Trends, Perspectives and Prospects of Machine Learning Applied to Biomedical Systems in Internet of Medical Things", IEEE Access. Co-Guest Editors: Kelvin KL Wong, Dhanjoo N Ghista, and Wanqing Wu. *on-going*.
  22. Special Issue on "Next-Generation Smart Body Sensor Networks: from Autonomic Body Sensors to Cognitive Body Sensor Networks Ecosystems", IEEE Sensors Journal. co-Guest Editors: Y. Li, M. Yuce, R. Jafari. *on-going*.
  23. Special Issue on "Deep Learning Architectures and Applications for Wireless Networks and Service Management", Wireless Communications and Mobile Computing. co-Guest Editors: Stenio Fernandes, Gabriel Wainer, Dave Cavalcanti, Ricardo Schmidt. *on-going*.
  24. Special Issue on "Edge of the Cloud", in Future Generation Computer Systems, co-Guest Editors: Anne James, Jiang and K. Chao. *on-going*.
  25. Special Issue on "Emerging Edge-of-Things Computing: Opportunities and Challenges", in Future Generation Computer Systems, co-Guest Editors: Mohammad Mehedi Hassan (Leading Guest Editor), A.M. Goscinski, Giancarlo Fortino, Sourav Bhattacharya, Sheng Chen (IEEE Fellow), Mengchu Zhou (IEEE Fellow). *on-going*.
  26. Special Issue on "Emerging Social Internet of Things: Recent Advances and Applications", in IEEE IoT Journal, co-Guest Editors: Prof. M. Zhou (NJIT, USA), M. M. Hassan (KSU, Saudi Arabia), Md Z. A. Bhuiyan (Fordham University, USA), Jianqiang Li (Beijing University of Technology, China), A.M. Goscinski (Deakin University, Australia), Sourav Bhattacharya (Nokia Bell Labs, Ireland). *on-finalization*.
  27. Special Issue on "Cognitive Internet of Things", in IEEE IoT Journal, Guest Editors: Min Chen (Lead), Tianyi Xing, Yin Zhang, Giancarlo Fortino, and Victor C.M. Leung. *on-finalization*.
  28. Special Issue on "Cognitive Services Integrating with Big Data, Cloud Computing and IoT", in Big Data and Cognitive Computing, MDPI, co-Guest Editors: Prof. Dr. Victor C.M. Leung and Dr. Y. Zhang. 2017
  29. Special Issue on "Artificial Intelligence in Modeling and Simulation", in SIMULATION (Sage Pub), co-Guest Editors: Prof. Tülay Yildirim, Yildiz Technical University, Turkey. 2017
  30. Special Issue on "Advances in Multi-Sensor Fusion for Body Sensor Networks: Algorithms, Architectures, and Applications" in Information Fusion Journal, co-Guest Editors: Dr Hassan Ghasemzadeh, Washington State University

- (USA), hassan@eecs.wsu.edu, Dr Raffaele Gravina, University of Calabria (Italy), r.gravina@dimes.unical.it, Dr Peter X. Liu, Carleton University (Canada), xpliu@sce.carleton.ca, Dr Carmen C.Y. Poon, The Chinese University of Hong Kong (HK), cpoon@surgery.cuhk.edu.hk, Dr Zhelong Wang, Dalian University of Technology (China), wangzl@dlut.edu.cn. 2017
31. Special Issue on "Body Area Networks" in IEEE Access, co-associate editor: Dr. Ladislau Matekovits. 2017
  32. Special Issue on "Advances in Body Sensor Networks: sensors, systems, and applications" in Sensors (MDPI), co-Guest Editor: W. Li, Y. Zhang, L. Benini, 2017.
  33. Special Issue on "Emotion-aware Mobile Computing" in IEEE Access, co-Guest Editor: Dr. Yin Zhang, Zhongnan University of Economics and Law (China), Dr. Honggang Wang (University of Massachusetts Dartmouth, USA) and Dr. Wei Wang (San Diego State University, USA). 2017.
  34. Special Issue on "Emotion-aware Healthcare Systems Integrating with Wearable and Cloud Computing" in Multimedia Tools and Applications, co-guest-editors: Yin Zhang (Zhongnan University of Economics and Law, China), Giancarlo Fortino (University of Calabria, Italy), Long Hu (The University of British Columbia, Canada), Kai Lin (University of Pennsylvania, USA). 2017.
  35. Special Issue on "Convergence of Internet of Things and Cloud Computing: Recent Advances and Future Trends" in Cluster Computing, co-Guest Editors: Mohammad Mehedi Hassan, King Saud University, Riyadh, Saudi Arabia, Kim-Kwang Raymond Choo, University of South Australia, Australia, Meikang Qiu, Pace University, USA, Sheng Chen (IEEE Fellow), University of Southampton, United Kingdom. 2017.
  36. Special Issue on "Cyber-physical Systems (CPS), Internet of Things (IoT) and Big Data" in Future Generation Computing Systems (FGCS). Co-editor: S. Ochoa, G. Di Fatta. 2015. 2017.
  37. Special Issue on "Modeling, Simulation & Applications: New Directions", in Complex Adaptive Systems Modeling. Co-editor: M. Niazi, 2016. 2017.
  38. Special Issue on "Engineering Future Interoperable and Open IoT Systems" in Journal of Network and Computer Applications (JNCA). Co-editor: S. Ochoa, G. Di Fatta, C. Palau, 2017.
  39. Special Issue on "Best papers from Bodynets 2014" in IEEE Trans. on Affective Computing. Co-editor: G.-Z. Yang. 2016.
  40. Special Issue on CSCWD 2014/2015 in IEEE Trans. on Service Computing. Co-editor: Weiming Shen, W. van der Aalst et al. 2016.
  41. Special Issue on "Advances and Applications of Internet of Things for Smart Automated Systems" in IEEE Transactions on Automation Science and Engineering. Co-editor: Weiming Shen, MengChu Zhou. 2016.
  42. Special Issue on "Mobile Collaborative Systems" in Mobile Information Systems. Co-editor: Weiming Shen, S. Ochoa, Wenfeng Li.
  43. Special Issue on "Enhancing Internet and Distributed Computing Systems with Wireless Sensor Networks" on Int'l Journal of Distributed Sensor Networks. Co-editor: R. Gravina, A. Liotta, W. Li, M. M. Hassan, 2015.
  44. Special Issue on "Human-centered Internet of Things", IEEE Transactions on Human-Machine Systems, Co-editor: Sergio F. Ochoa, Weiming Shen, MengChu Zhou. *Turned into regular issue editing.*
  45. Special issue on "IDCS 2013", CCPE (Concurrency Computation: Practice and Experience) Wiley, Co-editor: Dr. Mukaddim Pathan et al. 2015.
  46. Special issue on "Agent-oriented methods for engineering complex distributed systems", EAAI (Engineering Applications of Artificial Intelligence) Elsevier. 2015.
  47. "Wireless Technology for Pervasive Healthcare", MONET Journal (Springer). Co-editors: Dr. Xu Li, Inria, France, Dr. Xiaodong Lin, UOIT, Canada, Dr. Oscar Mayora, CREATE-NET, Italy, Dr. Enrico Natalizio, INRIA, France, Prof. Mehmet Yuce, Monash Univ., Australia.
  48. "Collaborative Wireless Sensor Networks", Information Fusion (INFFUS), Elsevier. Co-editors: Dr. Mert Bal, Miami University (USA), Prof. Wenfeng Li, Wuhan University of Technology (China), Dr. Weiming Shen, National Research Council (Canada).
  49. "Integration of Cloud Computing and Body Sensor Networks", Future Generation Computing Systems (FGCS), Elsevier. Co-editor: Dr. Mukaddim Pathan.
  50. "Agent-Based Modeling and Simulation", Journal of Simulation (JoS), Palgrave. Co-editor: M.J. North, Argonne National Lab (USA), 2013.
  51. "Special Issue of Intelligent Distributed Computing 2012", SAGE CERA Journal. 2013.
  52. "Internet-based Content Delivery", *Computer Networks (COMNET)*, Elsevier. Co-editors: Dr. Carlo Mastroianni, Dr. George Pallis, Dr. Mukaddim Pathan, Prof. Athena Vakali. 2011.
  53. "Simulation-based development of Multi-Agent Systems", International Journal of Simulation Modeling Practice and Theory (SIMPAT), Elsevier. Co-editors: Dr. M. Cossentino, Prof. Juan Pavon, Dr. Marie-Pierre Gleizes. 2010.
  54. "Next Generation Content Networks", International Journal of Networks and Computers Applications (JNCA), Elsevier. Co-editor: Dr. C. Mastroianni. 2009.



55. "Content Management and Delivery through P2P-based Content Networks", International Journal of Multi-Agent and Grid Systems, IOS Press. Co-editor Dr. C. Mastroianni. 2009.
56. "Enhancing Content Networks with P2P, GRID and Agent technologies", Future Generation Computer Systems The International Journal of Grid Computing: Theory, Methods and Applications, Elsevier. Co-editor: Dr. C. Mastroianni. 2008.
57. "Multi-Agent Systems and Simulation", International Journal of Agent Oriented Software Engineering, Inderscience publishing. Co-editors: Dr. M. Cossentino and Prof. Wilma Russo. 2008.
58. "Streaming Content Distribution Networks for e-Learning and e-Entertainment", ITSE Journal. Co-editor: prof. C.E. Palau. 2006.

#### **Co-editor of Books (*no conference proceedings*):**

1. *Next Generation Content Delivery Infrastructures: Emerging Paradigms and Technologies* (G. Fortino and C.E. Palau, Eds.), IGI Global, 2011.
2. *Internet of Things based on Smart Objects: technology, middleware and applications* (G. Fortino and P. Trunfio, Eds.), Springer Series on the Internet of Things: Technology, Communications and Computing. 2014.
3. *Management of Cyber Physical Objects in the Future Internet of Things: Methods, Architectures and Applications* (G. Fortino, A. Guerrieri, V. Loscri, A. Rovella, Eds.). Springer Series on the Internet of Things: Technology, Communications and Computing. 2016.
4. *Interoperability, Integration, and Interconnection of Internet of Things Systems* (R. Gravina, C. Palau, A. Liotta, M. Manso, G. Fortino, Eds.). Springer Series on the Internet of Things: Technology, Communications and Computing. 2017.
5. *The INTER-IoT Project: An Holistic Approach for IoT Platforms Interoperability* (G. Fortino, C. Palau, et al., Eds) Springer Series on the Internet of Things: Technology, Communications and Computing. 2019. *To appear.*
6. *Integration of Internet of Things and Business Process Management* (G. Fortino, M. La Rosa, M. Mecella, Eds.) Springer Series on the Internet of Things: Technology, Communications and Computing. 2019. *To appear.*

#### **Member of the Steering Committee International Conferences/Workshops**

1. IEEE International Conference on Human-Machine Systems (HMS) (*co-chair of the steering com*)
2. International Workshop on Edge-of-Things (EoT)
3. IEEE International Conference on Networking, Sensing and Control (ICNSC)
4. International Workshop on Globe-IoT
5. International Workshop on Interoperability, Integration, and Interconnection of Internet of Things Systems (I4T)
6. International Workshop on Interactive and Wearable Computing and Devices (IWCD)
7. IEEE Computer Supported Collaborative Work in Design (CSCWD)
8. International Conference EAI/ACM Bodynets
9. International Forum of IoT and Applications (IF[IoT&A])
10. International Conference on Internet and Distributed Computing Systems (IDCS)
11. International Workshop on Multi-Agent Systems and Simulation (MAS&S)
12. JAWS (Joint Agent-based Workshops in Sinergy)
13. International Symposium on Intelligent Distributed Computing (IDC)
14. Workshop on Objects and Agents, Italian Reference Workshop of the Italian Agent Community.
15. International Workshop on Data-intensive Process Management in Large-Scale Sensor Systems (DPMSS) - *The workshop series was ended in 2015 after three successful editions. It was always organized in IEEE ACM/IEEE ccGRID (2013-2015).*
16. Workshop on Self-Organizing Wireless Access Networks for Smart City (SWANSITY)
17. UPGRADE-CN (the Use of P2P, GRid and Agents for the DEvelopment of Content Networks) – *the workshop series was ended in 2010 after five successful editions. It was organized in IEEE HPDC (2006-2009) and ACM/IEEE ccGRID (2010).*

#### **Chair of Conferences/Workshops/Special Sessions**

1. **General Chair of 2021 CyberSciTech/DASC/PICom/CBDCCom, Calabria, Italy, 2021.**
2. **Program Co-Chair for Quality Control/Assurance, IEEE SMC 2021, Melbourne, 2021.**
3. **Special Session Co-Chair of BSN 2021, Athens, Greece, 2021.**
4. **Executive General chair of IEEE Conference CyberTech 2020, Calgary, Canada 2020.**

5. Associate Editor (07. Biomedical Sensors and Wearable Systems) of EMBC 2020 - 2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), July 20-24, 2020, Montréal, Canada.
6. **General chair of IEEE Conference Human-Machine Systems (ICHMS) 2020, Rome, Italy, Apr. 2020.**
7. **General co-chair of IDC (Intelligent Distributed Computing) 2020, Scilla (RC), Italy, Oct. 2020.**
8. **General co-chair of Bodynets 2020.**
9. **Co-chair of Management for Industry 4.0 Workshop @ NOMS 2020.**
10. **Publicity Co-Chairs of The IEEE/ACM international conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE) 2020, Washington DC.**
11. **Area-chair human-machine systems** of IEEE SMC conference 2019, Bari (Italy), 2019.
12. **Special session chair of IDCS (Internet and Distributed Computing Systems) 2019, Naples (Italy), Oct. 2019.**
13. Leading Co-chair of Globe-IoT 2019 workshop jointly held with IEEE WF-IoT 2019, Limerick, Ireland, Apr. 2019.
14. Co-chair of Big Data Networking Symposium, jointly held with the 15th International Wireless Communications & Mobile Computing Conference, Tangier, June 2019, IWCMC 2019 Website: <http://iwcmc.org/2019/>, co-chairs: Yong Li (Tsinghua University, China), Min Chen (Huazhong University of Science and Technology, China) et al.
15. Co-chair of Special Session on Internet of Things and Smart Logistics (co-chair: Wenfeng Li) at IEEE CSCWD 2019, Porto (Portugal), May 2019.
16. Co-chair of Workshop/Special Sessions, The 17th IEEE International Conference on Pervasive Intelligence and Computing (PICom 2019), 5-8 August 2019, Fukuoka, Japan.
17. Co-chair of Special Session on “Resilient Control in Large-Scale Networked Cyber-Physical Systems”, IEEE CODIT’19 April 23-26, 2019 –Paris, France. <http://codit19.com/index.php/special-sessions>
18. Award Co-Chair of IEEE ICNSC 2019, Banff (Canada), 2019.
19. Keynote & Panel Chair for SDS 2019 and FMEC 2019
20. Sponsorship Co-Chair for ICCCN 2019
21. Area Chair of The 4th International Symposium on Artificial Intelligence and Robotics - ISAIR2019 will be held in Kyungpook National University on August 20-24, 2019, Daegu, Korea. <https://isair.site/isair2019>
22. *Co-Chair of 2nd WGF – 2018 edition What grid for the future, what future for the grid. 7th of December 2018, Distretto Domus – Residence Chiodo 2 – Università della Calabria; From Consumers to Nonsumers: IoT-enabled models and technologies for energy communities*
23. Co-chair PICom 2018, The 16<sup>th</sup> IEEE Int’l Conference on Pervasive Intelligence and Computing (PICom 2018), Aug 6-10, Athens (Greece), 2018.
24. Co-chair of Big Data Networking Symposium, jointly held with the 14th International Wireless Communications & Mobile Computing Conference, St. Raphael Resort & Marina, Limassol, Cyprus, June 25th - 29th, 2018, IWCMC 2018 Website: <http://iwcmc.org/2018/>, co-chairs: Yong Li (Tsinghua University, China), Min Chen (Huazhong University of Science and Technology, China).
25. Co-chair of the International Conference IDCS 2018, Tokyo, Japan, Sept. 2018.
26. Co-chair of BiDU – Workshop on Big Social Data and Urban Computing @ Very Large Data Bases (VLDB) Conference 2018, <http://vldb2018.lncc.br/>. Jonice Oliveira (Universidade Federal do Rio de Janeiro, Brazil), Claudio Miceli (Universidade Federal do Rio de Janeiro, Brazil), Prof. Esther Pacitti (Université Montpellier, France)
27. Co-general chair of EAI BodyNets 2018, Oulu (Finland), 2-3 Oct. 2018.
28. Co-chair of Globe-IoT 2018 workshop jointly held with IEEE IoTDI and IC2E 2018, Orlando, USA, Apr. 2018.
29. Co-chair of the 9<sup>th</sup> edition of Special Session on “Collaborative Wireless Sensor Networks and IoT Technology” jointly held with IEEE SMC 2018, Japan, 2018.
30. Co-chair of the 3rd edition of Special Session on “Interactive and Wearable Computing and Devices” jointly held with IEEE SMC 2018, Japan, 2018.
31. General chair of ICNSC 2017, Calabria (Italy), 2017.
32. Co-general chair of EAI/ACM BodyNets 2017, Dalian, China, 28-29 Sept. 2017.
33. Co-chair of Track on “Complex Adaptive Systems Modeling & Simulation of Emergent Technologies” at FIT 2017, Co-chair: Dr. Muaz Niazi. [http://fit.edu.pk/index.php?option=com\\_content&view=article&layout=edit&id=114](http://fit.edu.pk/index.php?option=com_content&view=article&layout=edit&id=114)
34. Co-chair of the 2nd International Workshop IWCD (Interactive and Wearable Computing and Devices) 2016 @ IEEE ICNSC 2017, Calabria, Italy.
35. Co-Chair of INTER-IoT special session @ IEEE ICNSC 2017, Calabria, Italy.
36. Co-Chair of SIoT special session @ IEEE ICNSC 2017, Calabria, Italy.
37. Co-Chair of Big Data Networking Symposium @ The 13th International Wireless Communications & Mobile Computing Conference IWCMC 2017 Website: <http://iwcmc.org/2017/>, Valencia, Spain.
38. General co-chair of EAI INTER-IoT conference, Valencia (Spain), 2017.

39. Co-chair of Workshop JAWS/MAS&S @ IEEE FedCSIS 2017, Prague, Czech Republic.
40. Co-chair of the International Conference IDCS 2017, Fiji, Fiji.
41. Co-chair of the Special Session on “Distributed Adaptive Systems” jointly held with IEEE SMC 2017, Banff (Canada), 2017.
42. Co-chair of the 8<sup>th</sup> edition of Special Session on “Collaborative Wireless Sensor Networks and IoT Technology” jointly held with IEEE SMC 2017, Banff (Canada), 2017.
43. Co-chair of the 2nd edition of Special Session on “Interactive and Wearable Computing and Devices” jointly held with IEEE SMC 2017, Banff (Canada), 2017.
44. Program Co-Chair of EAI Tridentcom, Wuhan (China), 2017. <http://tridentcom.org/2017/show/cf-papers>
45. Track Co-Chair @ IEEE CSCN 2017, Track on *IoT, massive MTC and V2X* (3GPP, OneM2M, IETF): JaeSeung Song (Sejong Univ, South Korea), Andreas Kunz (NEC Europe, Germany), Zexian Li (Nokia Bell Labs, Finland), Giancarlo Fortino (University of Calabria, Italy).
46. Co-chair of Globe-IoT workshop jointly held with IEEE CCNC 2017, Las Vegas, Jan. 2017.
47. Publicity co-Chair of 2<sup>nd</sup> IEEE IoTDI 2017 jointly held with CPSWeek 2017.
48. Co-general chair of EAI/ACM BodyNets 2016, Turin, Italy.
49. Co-chair of 1st International Workshop on Interoperability, Integration, and Interconnection of Internet of Things Systems (I4T 2016) jointly held with IEEE IoTDI and IC2E, Berlin, 4 Apr 2016.
50. Co-chair of Workshop JAWS/MAS&S @ IEEE FedCSIS 2016, GDansk, Poland.
51. Co-chair of the International Conference IDCS 2016, Wuhan, China.
52. Co-chair of the 1st International Workshop IWCD (Interactive and Wearable Computing and Devices) 2016 @ IEEE CSCWD 2016, Nanchang, China.
53. Co-chair of the 5th International Workshop IoT & Logistics 2016 @ IEEE CSCWD 2016, Nanchang, China.
54. Co-chair of the 7<sup>th</sup> edition of Special Session on “Collaborative Wireless Sensor Networks and IoT Technology” jointly held with IEEE SMC 2016, Budapest, 2016.
55. Co-chair of the 1st edition of Special Session on “Interactive and Wearable Computing and Devices” jointly held with IEEE SMC 2016, Budapest, 2016.
56. Co-chair of Track on Modeling, Simulation & Applications of ICT, FIT 2016 (14th International Conference on Frontiers of Information Technology), December 14-16, 2016 at Islamabad Pakistan. Co-chair: Dr. Muaz Niazi.
57. General chair of IEEE CSCWD (Computer Supported Collaborative Work in Design) 2015, Calabria (Italy). CSCWD is the flagship conference of the CSCWD TC of the IEEE SMC society.
58. Co-chair of EAI/ACM BodyNets 2015, Sydney, Australia.
59. Co-chair of IDCS 2015, Reading, UK.
60. Co-chair of UCAmI 2015: 8th International Conference on Ubiquitous Computing & Ambient Intelligence (UCAmI 2015), Puertos Varas, Chile.
61. Co-chair of First International Workshop on the Convergence of Cloud computing, Internet of Things and Social Media (CISME 2015), October 28-30, 2015 -- Daejeon, South Korea, in Conjunction with CloudComp 2015, co-chairs: Mohammad Mehedi Hassan, King Saud University, Saudi Arabia, Yang Xiang, Deakin University, Australia.
62. Co-chair of Track on Modeling, Simulation & Applications of ICT, FIT 2015 (13th International Conference on Frontiers of Information Technology), December 14-16, 2015 at Islamabad Pakistan. Co-chair: Dr. Muaz Niazi.
63. Co-chair of Workshop DPMSS 2015 @ IEEE/ACM ccGRID 2015
64. Co-chair of Workshop JAWS/MAS&S @ IEEE FedCSIS 2015, Lodz, Poland.
65. Co-Chair 6<sup>th</sup> edition of Special Session on “Collaborative Wireless Sensor Networks and IoT Technology” jointly held with IEEE SMC 2015, Hong-Kong, 2015.
66. Co-chair of 4th edition of Workshop on IoT and Logistics, CSCWD 2015, co-chair: Wenfeng Li and A. Guerrieri.
67. Co-chair of Track "Secure Technology for Distributed Computation and Sensor Networks" @ 3PGCIC-2015 conference - 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing, November 4-6, 2015, Krakow, Poland.
68. General chair of EAI/ACM BodyNets 2014, London (UK).
69. General chair of IDCS (Internet and Distributed Computing Systems) 2014, Calabria (Italy).
70. Co-chair of Workshop UBICITEC 2014 @ CPSWeek 2014
71. Co-chair of Workshop DPMSS 2014 @ IEEE/ACM ccGRID 2014
72. Co-chair of Workshop MASGEM @ PAAMS 2014
73. Co-chair of Workshop JAWS/MAS&S @ IEEE FedCSIS 2014
74. Co-chair of Workshop I-MASC @ CTS 2014
75. Co-chair of 3rd edition of Workshop on IoT and Logistics, CSCWD 2014, co-chair: Wenfeng Li.
76. Co-Chair 5<sup>th</sup> edition of Special Session on “Collaborative Wireless Sensor Networks and IoT Technology” jointly held with IEEE SMC 2014, San Diego (USA), 2014.

77. Vice-Chair of EAI/ACM BodyNets 2013, Boston, Usa.
78. Co-chair of Special Track CCPS – EAI/ACM Bodynets 2013, Boston, Usa.
79. The 2013 International Workshop on Cloud-assisted Smart Cyber-Physical Systems (C-SmartCPS 2013) @ ICA3PP 2013, Sorrento, Italy.
80. 6th International Conference on Internet and Distributed Computing Systems (IDCS 2013). Hangzhou, China, 28-30 October 2013.
81. 4<sup>th</sup> edition of Special Session on “Collaborative Wireless Sensor Networks and IoT Technology” jointly held with IEEE SMC 2013, Manchester (UK), 2013.
82. 7<sup>th</sup> Workshop “Multi-Agent Systems and Simulation (MAS&S 2013)” jointly held with Multiagent System Conference (MATES 2013) – 2013, Koblenz, Germany, September, 15-16, 2013. Co-chairs: Dr. Juan Botia.
83. 1<sup>st</sup> Workshop on Multi-agent Based Applications for Sustainable Energy Systems (MASSES) as part of 11th Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS), Salamanca (Spain), 22nd-24th May, 2013. Co-chairs: R. Unland and R. Kowalczyk.
84. 2<sup>nd</sup> Workshop DPMSS (Data-intensive Process Management in Large-Scale Sensor Systems) 2013 jointly held with ACM/IEEE ccGrid 2013 (Delft, Netherlands). Co-chair: A. Cuzzocrea (ICAR-CNR, Italy), O. Rana (Univ. of Cardiff, UK). May, 13, 2013.
85. 4<sup>th</sup> International Workshop on Networks of Cooperating Objects for Smart Cities 2013 (CONET/UBICITEC 2013) jointly held with CPSWeek 2013, Philadelphia, PA, USA, April 8, 2013. Co-chair: Pedro Jose' Marron (University of Duisburg-Essen), Stamatis Karnouskos (SAP Research), Jose L. Martinez Lastra (Tampere University of Technology).
86. 2nd edition of Workshop on IoT and Logistics, CSCWD 2013, co-chair: Wenfeng Li.
87. 6<sup>th</sup> International Symposium on IDC (Intelligent Distributed Computing) 2012, 24-26 Sept., Calabria, Italy. General and Program Chair.
88. 6<sup>th</sup> Workshop “Multi-Agent Systems and Simulation (MAS&S 2012)” jointly held with FEDERATED CONFERENCE ON COMPUTER SCIENCE AND INFORMATION SYSTEMS, FedCSIS – 2012, Wroclaw, Poland, September, 2012. Co-chairs: Dr. J. Botia and Dr. F. Kugln.
89. 1<sup>st</sup> Workshop DPMSS (Data-intensive Process Management in Large-Scale Sensor Systems) 2012 jointly held with ACM/IEEE ccGrid 2012 (Ottawa, Canada). Co-chair: A. Cuzzocrea (ICAR-CNR, Italy). May, 13, 2012.
90. 4<sup>th</sup> edition of special session on Collaborative Wireless Sensor Networks jointly held with SMC 2012 (Seoul, South Korea). Co-chair: Prof. Weiming Shi, Prof. Wenfeng Li and Dr. Mert Bal.
91. 1st edition of Workshop on IoT and Logistics, CSCWD 2012, co-chair: Wenfeng Li.
92. 12<sup>th</sup> Workshop WOA 2011 “From Objects to Agents”, Rende (CS), Italy. Co-chair: Prof. W. Russo, Dr. Alfredo Garro, Prof. Luigi Palopoli, Dr. Giandomenico Spezzano.
93. 3<sup>rd</sup> edition of special session on Collaborative Wireless Sensor Networks jointly held with SMC 2011 (Anchorage, USA). Co-chair: Prof. Weiming Shi, Prof. Wenfeng Li and Dr. Mert Bal.
94. Foundation of JAWS (Joint Agent-oriented Workshops in Synergy) which includes: ABC 2011, MAS&S 2011, and SOCASE 2011. JAWS is hosted by FEDERATED CONFERENCE ON COMPUTER SCIENCE AND INFORMATION SYSTEMS, FedCSIS – 2011, Szczecin, Poland, 19-21 September, 2011. Co-chairs: Dr. Maria Gamzha, Dr. Marcin Paprzicki, and Prof. Rainer Unland.
95. 5<sup>th</sup> Workshop “Multi-Agent Systems and Simulation (MAS&S 2011)” jointly held with FEDERATED CONFERENCE ON COMPUTER SCIENCE AND INFORMATION SYSTEMS, FedCSIS – 2011, Szczecin, Poland, 19-21 September, 2011. Co-chairs: Dr. Jorge Gomez and Dr. Carole Bernon.
96. The 4th International Workshop on Internet and Distributed Computing Systems (IDCS 2011) in conjunction with ICA3PP'11, October 24-26, 2011, Melbourne, Australia”. Co-chairs: Jemal Abawajy - Deakin University, Australia, Ragib Hasan - Johns Hopkins University, USA, and Mustafizur Rahman - IBM, Australia.
97. Track session “Modeling and Simulation for Biosciences and Bioinformatics” in Workshop “Modeling & Simulation in Healthcare” at the European Modeling & Simulation Symposium 2011 (EMSS 2011). Co-Chairs, Muaz Niazi (COMSATS Institute of IT, Islamabad Pakistan) and Amir Hussain (University of Stirling, Scotland, UK) [ahu@cs.stir.ac.uk](mailto:ahu@cs.stir.ac.uk).
98. 5<sup>th</sup> Workshop on “Content Delivery Networks (CDN) 2010” jointly held with 10th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2010) 17-20 May 2010, Melbourne, Australia, co-chairs: Dr. George Pallis (University of Cyprus), Dr. Mukaddim Pathan (University of Melbourne), Dr. Swaminathan Sivasubramanian (Amazon.com, Inc., USA).
99. 4<sup>th</sup> Workshop on “the Use of P2P, GRid and Agents for the Dvelopment of Content Networks (UPGRADE-CN'09)”, jointly held with IEEE HPDC '09, Munich, Germany, 10 June 2009. Co-chairs: Dr. Carlo Mastroianni (ICAR/CNR, Italy), Dr. Mukaddim Pathan (University of Melbourne), Prof. Athena Vakali (Aristotle University of Thessaloniki, Greece).

- 100.3<sup>rd</sup> Workshop on “Multi-agent System and Simulation (MAS&S’2009): Towards an Integration of Agent-Oriented Software Engineering and Simulation”, as part of the Int’l Conference MALLOW’09 (Multi-Agent Logics, Languages, and Organisations Federated Workshops), Turin, Sep. 7-11, 2009. Co-chairs: Dr. Massimo Cossentino (ICAR/CNR, Italy), prof. Juan Pavon (Universidad de Madrid, Spain) e la prof. Marie-Pierre Gleizes (Université Paul Sabatier, France).
101. The Fifth IEEE International Conference on Networking and Services (ICNS 2009), co-chaired with Burakowski W. , Casares V. , Dini P. , Jia X. , Sierra-pérez M. , Lloret Mauri J. , Ung K. Y. , Lehmann L. , Sánchez F. J., Sales S. , Xia F. , 2009.
- 102.1<sup>st</sup> special session on “Self-Adaptive Agents”, within IEEE International Symposium on Intelligent Agents – part of the IEEE Symposium Series on Computational Intelligence 2009, March 30 – April 2, 2009, Nashville, TN, USA. Co-chairs: Dr. Amir Hussain (University of Stirling, UK), Dr. Sherief Abdallah (British University in Dubai, UAE), Muaz Niazi (Foundation University, Pakistan).
- 103.3<sup>rd</sup> Workshop on “the Use of P2P, GRid and Agents for the DEvelopment of Content Networks (UPGRADE-CN’08)”, jointly held with IEEE HPDC’08, Boston, MA, USA, 23 June 2008. Co-chairs: Dr. C. Mastroianni (ICAR/CNR, Italy) and Dr. Mukaddim Pathan (University of Melbourne).
- 104.2<sup>nd</sup> Workshop on “the Use of P2P, GRid and Agents for the DEvelopment of Content Networks (UPGRADE-CN’07)”, jointly held with IEEE HPDC’07, Monterey, CA, USA, 26 Jun 2007. Co-chairs: Dr. C. Mastroianni (ICAR/CNR, Italy) and Dr. Guillaume Pierre (Vrye University).
- 105.2<sup>nd</sup> Workshop on “Multi-agent System and Simulation (MAS&S’07)”, jointly held with EUROSIS ESM (European Simulation and Modeling Conference), Malta, 23 Oct 2007. Co-chairs: Dr. M. Cossentino (ICAR/CNR, Italy) and Prof. Juan Pavon (Universidad Complutense de Madrid).
- 106.1<sup>st</sup> Workshop on “the Use of P2P, GRid and Agents for the DEvelopment of Content Distribution Networks (UPGRADE-CDN’06)”, jointly held with IEEE HPDC’06, Paris, France, 19 Jun 2006. Co-chairs: Dr. C. Mastroianni (ICAR/CNR, Italy) and Prof. C.E. Palau (Politechnique of Valencia, Spain).
- 107.1<sup>st</sup> Workshop on “Multi-agent System and Simulation (MAS&S’06)”, jointly held with EUROSIS ISC (Industrial Simulation Conference), 5 Jun 2006. Co-chairs: Dr. M. Cossentino (ICAR/CNR, Italy) and Prof. W. Russo (University of Calabria).

#### **Member of Program Committees of International Conferences**

He is/was in international program committees of many (>500) international conferences/workshops sponsored by IEEE, ACM, Springer, SCS, IARIA, IASTED, EUROSIS, etc.

#### **Reviewer for International Journals**

He also served as invited reviewer for the following premiere international journals:

##### **IEEE:**

IEEE Access  
 IEEE Aerospace and Electronic Systems Magazine  
 IEEE Communications Magazine  
 IEEE Internet Computing  
 IEEE Internet of Things Journal  
 IEEE Journal of Biomedical and Health Informatics  
 IEEE Networks  
 IEEE Sensors Journal  
 IEEE SMC Magazine  
 IEEE Systems Journal  
 IEEE Transactions on Automation Science and Engineering  
 IEEE Transactions on Big Data  
 IEEE Transactions on Cloud Computing  
 IEEE Transactions on Communications  
 IEEE Transactions on Cybernetics  
 IEEE Transactions on Human-Machine Systems  
 IEEE Transactions on Industrial Electronics  
 IEEE Transactions on Industrial Informatics  
 IEEE Transactions on Instrumentation and Measurements  
 IEEE Transactions on Intelligent Transportation Systems  
 IEEE Transactions on Knowledge and Data Engineering  
 IEEE Transactions on Multimedia Systems  
 IEEE Transactions on Network and Service Management

IEEE Transactions on Neural Networks and Learning Systems  
IEEE Transactions on Sustainable Computing  
IEEE Transactions on Parallel and Distributed Systems  
IEEE Transactions on Signal Processing  
IEEE Transactions on Systems Man and Cybernetics--Part A: Systems  
IEEE Transactions on Systems Man and Cybernetics--Part C: Applications and Reviews  
IEEE Transactions on Systems Man and Cybernetics: Systems  
IEEE Transactions on Very Large Scale Integration Systems

**ACM:**

ACM Communications of ACM  
ACM Transactions on Autonomous and Adaptive Systems  
ACM Transactions on Internet Technology  
ACM Transactions on Modeling and Computer Simulation  
ACM Transactions on Sensor Networks  
ACM Transactions on the Web;

**Elsevier:**

Advanced Engineering Informatics  
Annual Reviews in Control  
Computer Communications  
Computer Networks  
Computer Standards and Interfaces  
Computers in Biology and Medicine  
Computers and Electrical Engineering  
Computers in Industry  
Data and Knowledge Engineering  
Enterprise Information Systems.  
Expert Systems With Applications  
Future Generation Computer Systems  
Information and Software Technology  
Information Fusion  
Information Sciences  
International Journal of Human-Computer Studies  
Journal of Computational Science  
Journal of Economic Behavior and Organization  
Journal of Network and Computer Applications  
Journal of Systems and Software  
Journal of Systems Architecture  
Microelectronics Journal  
Pervasive and Mobile Computing  
Robotics and Autonomous Systems  
Science of Computer Programming

**Springer:**

Circuits  
Computing  
Earth Science Informatics  
Journal of Computer Science and Technology  
Journal of Zhejiang University Science C (Computers & Electronics)  
Progress in Artificial Intelligence  
Systems and Signal Processing  
Transactions of Computational Collective Intelligence  
Wireless Networks

**Other Publishers:**

Autosoft Journal: Intelligent automation & Soft Computing  
Computer Science and Information Systems  
Concurrency and Computation: Practice & Experience, Wiley  
Multi-Agent and Grid Systems, IOS Press  
Sensors — Open Access Journal  
Sensors & Actuators: A. Physical  
Service Science  
Simulation: Transactions of the Society for Modeling and Simulation International

### IEEE Society Positions and Activities

In the framework of the IEEE society, he is *Senior Member*. He is member of Computer, SMC, and Communications societies (and other initiatives such as IoT initiative).

In particular, he is active member of the SMC (Systems, Man and Cybernetics) society where he serves as:

- Member-at-large of the Board-of-Governors (BoG), 2018-2020 term;
- IEEE SMC Italian Chapter Chair since 2016;
- Co-founding co-chair of the IEEE SMC Technical Committee on "Interactive and Wearable Computing and Devices";
- Active members of the following technical committees: Computer Supported Cooperative Work in Design (CSCWD), Distributed Intelligent Systems (DIS), and Environmental Sensing, Networking and Decision-Making (ESND), of which he is also a founding member.
- Member of the Publication Committee of IEEE SMCS (since 2017).
- Member of SMCS HMS Committee (since 2019).

He was in the IEEE Press Editorial Board of Governors (2016-2018 term), being very active in launching new initiative involving IEEE Book series (he founded the brand new IEEE Book series on Human-Machine Systems) and connecting IEEE Press with IEEE SMCS.

In the IEEE EMBS, he is also member of WBSS TC: his main activity involves the promotion of research and events on middleware for BSN systems. In the IEEE Communications Society, he is also founding member of IEEE SIG on Big Data for Healthcare, Medicine and Biology. He is also member of the IEEE CIS Smart World Technical Committee.

### Other Scientific societies

He is member of ACM since 2002 and was member of IFAC, SCS, ISCA, Eurosis, etc. Recently, he was invited to be member of the OCIBE society committee: <http://www.ocibe.com/bsc.html>, Overseas Chinese International Biomedical Engineering Society.

### INVITED TALKS, KEYNOTES, TUTORIALS, AND PANELS

1. Keynote "Wearable Computing Systems based on Body Sensor Networks: State-of-the-art and Future Research Challenges" at 4th International Conference on Computer-Human Interaction Research and Applications (CHIRA), 5-6 November, 2020, Budapest, Hungary.
2. Keynote "From Modeling to Implementation of Cognitive and Wearable Computing Systems based on Body Sensor Networks: the SPINE project", at 10th IEEE International Conference on Cognitive Infocommunications, 23-25 Oct 2019, Naples, Italy.
3. Invited Talk "Agents meet the IoT: Towards Cognitive and Interoperable Ecosystems of Networked Smart Objects", at Tsinghua University, Beijing, China, Hosted by Prof. Zhao, Sep. 20 2019.
4. Invited Talk "From Modeling to Implementation of Cognitive and Wearable Computing Systems based on Body Sensor Networks: the SPINE project", at Wuhan University of Science and Technology (China), Hosted by Prof. S. Wu, Sep. 20 2019.
5. Invited Talk "Towards Opportunistic IoT Services: A Novel Paradigm for Engineering the Next-generation IoT Systems", at Huazhong University of Science and Technology (China), Hosted by Prof. M. Chen, Sep. 19 2019.
6. Invited Talk "Towards Opportunistic IoT Services: A Novel Paradigm for Engineering the Next-generation IoT Systems", at ZUEL University, China. Hosted by Prof. Y. Zhang, Sep. 19 2019.
7. Lecture "A Reputation Capital and Blockchain-based Model to Support Group Formation Processes in the Internet of Things" at Wuhan University of Technology, Wuhan, China, Sep. 18 2018, hosted by Prof. W. Li.
8. Invited Talk "Towards Opportunistic IoT Services: A Novel Paradigm for Engineering the Next-generation IoT Systems", at Huazhong Agriculture University (China), Hosted by Dr. L. Yang, Sep. 17 2019.
9. Invited Talk "Towards Opportunistic IoT Services: A Novel Paradigm for Engineering the Next-generation IoT Systems", at Northeastern University, Boston (USA), Aug 2019.
10. Keynote "Towards Opportunistic IoT Services: A Novel Paradigm for Engineering the Next-generation IoT Systems", at IEEE ICSNC 2019, Banff (Canada), May 2019.

11. Invited Talk “Agents meet the IoT: Towards Cognitive and Interoperable Ecosystems of Networked Smart Objects”, InsightCenter for Data Analytics, NUI Galway (Ireland), hosted by Dr. A. Intizar, Feb, 4 2019.
12. Invited Talk “IoT Platforms Interoperability: A Methodological Approach”, National University of Singapore (NUS), hosted by Dr. H. Ren, Jan 2019.
13. Invited Talk “IoT Platforms Interoperability: A Methodological Approach” Nanyang Technical University (NTU), Singapore, hosted by Prof. L. Xie, Jan 2019.
14. Keynote on “The Role of Trust in Internet of Things Ecosystems”, at IEEE WF-IoT 2019, Limerick (Ireland), Apr. 2019.
15. Talk on “Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach” at WGF 2019 (What GRIDs for Future, What Future for GRIDs), Rende (CS), Italy, Dec 7 2018, sponsored by Italian Chapter of IEEE SMCS.
16. Coordinator of Panel on “Next-generation Internet-based Systems”, at IDCS Conference 2018, Tokyo (Japan), Oct 2018.
17. Keynote on “IoT Opportunistic Services: A Programming Paradigm for Next-generation IoT Systems” at IDCS Conference 2018, Tokyo (Japan), Oct 2018.
18. Keynote on “IoT Platforms Interoperability: A Methodological Approach” at IEEE PICOM 2018, Athens (Greece), Aug 2018.
19. Invited Talk “Towards Opportunistic IoT Services: A Novel Paradigm for Engineering the Next-generation IoT Systems”, Northwestern Polytechnical University (NPU), Xian, China, Jun 19 2018, hosted by Dr. Jianchao Luo.
20. Invited Talk “Agents meet the IoT: Towards Cognitive and Interoperable Ecosystems of Networked Smart Objects”, at School of Computer Science and Technology, Wuhan University of Technology, China. Hosted by Prof. W. Rao, Jul 2, 2018.
21. Lecture “Towards IoT Opportunistic Services: Models, Middleware and Use Cases” at Wuhan University of Technology, Wuhan, China, Jun 26 2018, hosted by Prof. W. Li.
22. Lecture “INTER-Meth: A Methodology for Heterogeneous IoT Platforms Integration” at Wuhan University of Technology, Wuhan, China, July 4 2018, hosted by Prof. W. Li.
23. Invited Talk “Agents meet the IoT: Towards Cognitive and Interoperable Ecosystems of Networked Smart Objects”, at C2SMART Distinguished Speaker Series. ZUEL University, China. Hosted by Prof. Y. Zhang, 28 Jun 2018.
24. Invited Talk “Research Directions in IEEE SMC TC on Interactive and Wearable Computing and Devices” at IEEE BoG Meeting and Workshop, Politecnico di Bari (Italy). Hosted by Prof. M.P. Fanti, 10 Jun 2018.
25. “Agents meet the IoT: Towards Cognitive and Interoperable Ecosystems of Networked Smart Objects”, at C2SMART Distinguished Speaker Series. New York University. Hosted by Prof. M Ghandehari, 13 Apr 2018.
26. “Agents meet the IoT: Towards Cognitive and Interoperable Ecosystems of Networked Smart Objects”, at University of Oulu, Faculty of Information Technology and Electrical Engineering, hosted by Prof. J. Riekkki (Faculty Dean), 22 Mar 2018.
27. "Cloud-assisted Body Area Networks: Towards Community Wearable Computing", at National University of Singapore, Singapore, hosted by Dr. H. Ren, Feb 6 2018.
28. Invited Seminar on " Agents meet the IoT: Towards Ecosystems of Networked Smart Objects" at University of Cagliari (Italy), 23 Jan. 2018, hosted by Prof. F. Roli.
29. Lecture on "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach" at Univ. of Bologna (Cesena campus), Nov. 2017, host: Prof. M. Viroli.
30. "Cloud-assisted Body Area Networks: Towards Community Wearable Computing", at South Eastern University (Nanjing), China, hosted by Prof. Xiaoping Li, Jul 14 2017.
31. "Cloud-assisted Body Area Networks: Towards Community Wearable Computing", at Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, China, hosted by Prof. Ye Li, June 28 2017.
32. "Towards Interoperable, Cognitive and Autonomic IoT Ecosystems: an Agent-based Approach", at Huazhong University of Science and Technology, Wuhan, China, July 2016, hosted by Prof. M. Chen
33. "Modeling Opportunistic IoT Services in Open IoT Ecosystems", at Huazhong University of Science and Technology, Wuhan, China, July 2016, hosted by Prof. M. Chen
34. "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach" at Maritime University of Shanghai (China), hosted by Dr. Xiuwen Fu, July 7 2017.
35. "Towards Interoperable, Cognitive and Autonomic IoT Ecosystems: an Agent-based Approach", Wuhan University of Technology, Wuhan, China, July 4 2017, hosted by Prof. W. Li.
36. "Modeling Opportunistic IoT Services in Open IoT Ecosystems", Wuhan University of Technology, Wuhan, China, July 11, 2017, hosted by Prof. W. Li.
37. "IoT platforms interoperability for Active and Assisted Living Healthcare services support", Wuhan University of Technology, Wuhan, China, July 18, 2017, hosted by Prof. W. Li.



38. Invited Talk on “Towards Interoperable, Cognitive and Autonomic IoT Ecosystems: an Agent-based Approach” at Data Science Center (DSC/e) (Eindhoven University of Technology), hosted by Prof. W. van der Aalst and Prof. Antonio Liotta, IoT Seminar Series.
39. Tutorial on “SPINE: Signal In-Node Processing”, at Int’l Body Sensor Networks Conference (IEEE), Eindhoven (NL), May 9-12, 2017. Co-speaker: Raffaele Gravina.
40. Keynote at TRIDENTCOM 2017, 12th EAI International Conference on Testbeds and Research Infrastructures for the Development of Networks & Communities December 7–8, 2017 | WUHAN, PEOPLE'S REPUBLIC OF CHINA: <http://tridentcom.org/2017/show/keynotes>
41. Invited Seminar on "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach" at New Jersey Institute of Technology (USA), 12 Jan. 2017, hosted by Prof. M. Zhou.
42. Invited Seminar on " Agents meet the IoT: Towards Ecosystems of Networked Smart Objects" at New Jersey Institute of Technology (USA), 12 Jan. 2017, hosted by Prof. M. Zhou.
43. Panelist on “IoT Interoperability: Standards vs Voluntary Approaches” at IEEE CNCC 2017, 8 Jan. 2017, Las Vegas, USA.
44. Keynote on "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach" at Bodynets 2016, 15 Dec. 2016, Turin, Italy.
45. Keynote on "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach" at OMT 2016, 27 Oct. 2016, Rhodes, Greece.
46. Keynote on "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach" at IDCS 2016, 28 Sept. 2016, Wuhan, China.
47. Invited Talk on "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach” at University of Reggio Calabria (Italy), 24 Nov. 2016, hosted by Dr. G.M. Sarnè.
48. Invited Talk on "Cloud-based Activity-aaS Service Cyberphysical Framework for Human Activity Monitoring in Mobility ", Wuhan University of Technology, Wuhan, China, 26 Sept. 2016, hosted by Prof. W. Li.
49. Invited Talk on "Towards Interoperability of Heterogeneous IoT Platforms:the INTER-IoT approach", Zhongnan University of Economics and Law, Wuhan, China, 23 Sept. 2016, hosted by Prof. Y. Zhang.
50. Invited Talk on "Agent-oriented Modeling and Simulation of IoT Networks ", Wuhan University of Technology, Wuhan, China, 15 July 2016, hosted by Prof. W. Li.
51. Tutorial on "Agents meet the IoT: Towards Ecosystems of Networked Smart Objects (AgIoT)", 18th European Agent Systems Summer School (EASSS-2016) to be held at the University of Catania, Catania, Italy, 28 July 2016.
52. Invited Talk on "Cloud-assisted Body Area Networks: Towards Community Wearable Computing", Huazhong University of Science and Technology, Wuhan, China, 15 July 2016, hosted by Prof. M. Chen.
53. Invited Talk on "Cloud-assisted Body Area Networks: Towards Community Wearable Computing", University of Electronic Science and Technology of China, Chengdu, China, 8 July 2016, hosted by Prof. D. Chen.
54. Invited Talk on "Enabling IoT Interoperability through Opportunistic Mobile Multi-Technology Gateways", Wuhan University of Technology, Wuhan, China, 6 July 2016, hosted by Prof. W. Li.
55. Invited Talk on "Agents meet the IoT: Towards Ecosystems of Networked Smart Objects", Wuhan University of Technology, Wuhan, China, 5 July 2016, hosted by Prof. W. Li.
56. Invited Talk on "A Mission-Oriented Coordination Framework for Teams of Mobile Aerial and Terrestrial Smart Objects", Wuhan University of Technology, Wuhan, China, 4 July 2016, hosted by Prof. W. Li.
57. Invited Talk on "INTER-IoT: Toward Global Interoperability of Internet of Things Ecosystems", Wuhan University of Technology, Wuhan, China, 14 Oct. 2015, hosted by Prof. W. Li.
58. Invited Talk on "Towards a Development Methodology for Smart Object-Oriented IoT Systems: a Metamodel Approach", Wuhan University of Technology, Wuhan, China, 8 Oct. 2015, hosted by Prof. W. Li.
59. Invited Talk on "Autonomic and Cognitive Architectures for the Internet of Things", Wuhan University of Technology, Wuhan, China, 8 Oct. 2015, hosted by Prof. W. Li.
60. Invited Talk on "Middleware for Smart Objects in the Internet of Things", Wuhan University of Technology, Wuhan, China, 29 May. 2015, hosted by Prof. W. Li.
61. Invited Talk on "Empowering Smart Large-Environments through interoperable Sensor Network and IoT Enablers", Workshop on Smart Ports, Wuhan University of Technology, Wuhan, China, 27 May. 2015, hosted by Prof. W. Li.
62. Invited Talk on "Cloud-assisted Body Area Networks: The BodyCloud Project", Wuhan University of Technology, Wuhan, China, 23 May. 2015, hosted by Prof. W. Li.
63. Invited Talk on "From Embedded Computing Frameworks for Body Sensor Networks to Cloud-assisted Body Area Networks", Dalian University of Technology, Dalian, China, 24 May. 2015, hosted by Prof. Z. Wang.
64. Invited Talk on "From Embedded Computing Frameworks for Body Sensor Networks to Cloud-assisted Body Area Networks", Washington State University, Pullman, WA, USA, 2014, hosted by Dr. H. Gasezadeh.

65. Keynote on "From Embedded Computing Frameworks for Body Sensor Networks to Cloud-assisted Body Area Networks ", EAI/ACM Int'l Conference Bodynets 2014, London, 1 Oct. 2014.
66. Invited Talk on "Autonomic Computing-based Wireless Sensor Networks", Wuhan University of Technology, Wuhan, China, 13 May. 2014, hosted by Prof. W. Li.
67. Invited Talk on "From Embedded Computing Frameworks for Body Sensor Networks to Cloud-assisted Body Sensor Networks ", Univ. of Massachusetts (Boston), 27 Sept. 2013, Prof. J. Suzuki.
68. Invited Talk on "From Embedded Computing Frameworks for Body Sensor Networks to Cloud-assisted Body Sensor Networks ", Wuhan University of Technology, Wuhan, China, 25 Oct. 2013, hosted by Prof. W. Li.
69. Invited Talk on "The SPINE framework: efficient programming of body sensor networks" at Univ. of Chile (Santiago), 2013, hosted by Prof. S. Ochoa.
70. Invited Talk on "Agents and Sensor Networks", University of GDansk, Jun. 2012, hosted by Dr. M. Ganzha.
71. Invited Talk on "Agents in Wireless Sensor Networks: issues and solutions", National Higher School of IT (ENSIAS), Rabat, Morocco, May 2012, hosted by Prof. M. Essaïdi.
72. Invited Seminar on "Agent-oriented Wireless Sensor Networks: State-of-the-art and Research Challenges", Technical University of Eindhoven (TU/e), Eindhoven, Netherlands, Apr. 2012, hosted by Prof. A. Liotta.
73. Invited Talk on "Agents in Wireless Sensor Networks: issues and solutions", Wuhan University of Technology, Wuhan, China, 24 May 2012, hosted by Prof. W. Li.
74. Talk on "C-SPINE: Collaborative Architecture for BSNs", WP4 Meeting of FP CONET Project, Rome (Italy), 2 May 2011.
75. Panel session on "Agents and Industry after 15 years from the birth of FIPA", speakers G. Fortino, F. Bergenti, D. Gotta, S. Venticinque, Workshop on Objects and Agents, Rende (CS), Italy, 6 Jul. 2011.
76. Invited Seminar on "Agent-based Frameworks for Distributed Computing: State-of-the-art and Research Challenges", University of Reading, UK, Sept. 2010, hosted by Dr. G. Di Fatta.
77. Talk on "SPINE2: task-oriented programming of wireless body area networks", 2nd Year General Meeting of FP CONET Project, Duisburg (Germany), 15 Nov 2010.
78. Invited Talk on "Agents and Sensor Networks", NATO Programme Security Through Science, Advanced Study Institute, "Software Agents, Agent Systems and their Applications", Tangiers, Morocco, Sept. 13-23, 2010.
79. Invited Talk on "An agent-based approach for the development of Wireless Body Sensor Network applications", University of Turin, Computer Science Dept., Turin (Italy), 29 Jun. 2010, Dr. M. Baldoni.
80. Panel session on "Next Generation Content Networks: trends and challenges", speakers G. Fortino, C. Mastroianni, M. Pathan, A. Vakali, 4th Int'l Workshop UPGRADE-CN'09, Munich, Germany, 9 Jun. 2009.
81. Panel session on "Computational Intelligence and Mobile Agents", organizer: Hani Hagrass, IEEE Symp. on Intelligent Agents 2009 @ IEEE SSCI 2009, Nashville, TN, USA, 30 March 2009.
82. Invited Talk on "A CASE tool-driven methodology for the simulation-based prototyping of distributed agent systems", Queensland University of Technology, Faculty of Science and Information Technology, Brisbane (Australia), 28 Sept. 2009, hosted by Prof. M. La Rosa.
83. Invited Talk on "Developing Next-Generation Content Distribution Networks and CDN-based Applications: experiences using emerging computing paradigms", University of Melbourne, Computer Science and Software Engineering Dept., Melbourne (Australia), 1 Sept. 2009, hosted by Prof. R. Buyya.
84. Invited Talk on "Mobile Agents in Telecommunications", Universidad Politecnica de Valencia, Dept. of Telecommunications, Valencia (Spain), 30 Apr. 2009, hosted by Prof. C. Palau.
85. Talk on "Simulation-driven Development of Multi-Agent Systems", 4th Meeting of AOSE TFG, 13 Dec. 2006.
86. Invited Talk on "Statecharts-based Agents", Doctoral School, 5th Workshop on Objects and Agents (WOA'06), Catania (Italy), Sept. 25, 2006.
87. Talk on "An Agent-based Approach for the management of distributed workflows", 3rd Meeting of the AgentLink III European project, AOSE TFG, Budapest, 16 Sept. 2005.
88. Talk on "The COMODIN Project: obtained results and future work", Universidad Politecnica de Valencia (Spain), 27 Jul. 2004, hosted by Prof. C. Palau.
89. Talk on "Provision of Cooperative Playbacks using a Content Distribution Network", Universidad Politecnica de Valencia (Spain), 13 Sept. 2003, hosted by Prof. C. Palau.
90. Talk on "Cooperative Playback Systems: models, architectures and systems", Universidad Politecnica de Valencia (Spain), 10 Jun. 2002, hosted by Prof. C. Palau.
91. Talk on "Completing Lossy Multicast Sessions using Auto Mobile Code", ICSI Workshop 1997 on Auto Mobile Code, International Computer Science Institute, Berkeley (CA), USA, 23 Set. 1997.

## PHD MENTORSHIP

He is/was (co)supervisor of the following PhD students:

- Samuele Mascillaro, “An agent-oriented methodology for the rapid prototyping of multi-agent systems”, 2006-2009. *Co-supervisor*
- Raffaele Gravina, “Domain-specific frameworks for programming Wireless Body Sensor Networks”, 2008-2011. *Supervisor*
- Antonio Guerrieri, “Building monitoring through wireless sensor networks”, 2008-2011. *Supervisor*
- Stefano Galzarano, “Techniques and methods for design and analysis of autonomic WSN systems”, 2010-2013. *Supervisor*
- Raffaele Conforti, “Run-time risk detection and mitigation in Workflow management system”, 2011-2014. *External Co-supervisor*. Main supervisor Marcello La Rosa, Queensland University of Technology, Australia.
- Antonio Augimeri, “Interaction among people through collaborative body sensor networks”, 2011. *External Co-supervisor*.
- Alessandro Sabato, “Structural health analyses based on Wireless Sensor Networks”, 2012-2014. *Supervisor*
- Xiuwen Fu, "Scale-free and Small-world based Methods for Complex Wireless Sensor Networks", 2013-2016. *External Co-supervisor*. Main supervisor Prof. Wenfeng Li, Wuhan University of Technology, Wuhan, China.
- CongCong Ma, "Multi-Sensor Fusion in Body Sensor Networks", 2014-on going. *External Co-supervisor*, main supervisor Prof. Wenfeng Li, Wuhan University of Technology, Wuhan, China.
- Claudio Savaglio, "Autonomic and Cognitive Development and Management of Internet of Things Systems", 2014-on going. *Supervisor*
- Yun Luo, “Communication Reliability in Industrial IoT environments”, 2016-on-going, *Joint-PhD Co-supervisor* with Prof. Wenfeng Li, Wuhan University of Technology, Wuhan, China.
- Ying Duan, “Communication Reliability in Industrial IoT environments”, 2016-on-going, *External Co-supervisor*. Main supervisor Prof. Wenfeng Li, Wuhan University of Technology, Wuhan, China.
- Ping Zhou, “Emotion Communication Systems”, 2016-on-going, *External supervisor*, *Main Supervisor* Prof. Min Chen, Huazhong University of Science and Technology, Wuhan, China.

#### **Foreign/External PHD Thesis Evaluator**

- Jorge Hortelano Otero, “Design and Implementation of Architectures for the Deployment of Secure Community Wireless Networks”. Advisors: Prof. Pietro Manzoni and Dr. Juan Carlos Cano Escribá. Universidad Politecnica de Valencia (Spain). 2010.
- Nejla Essaddi, “Target Mobility Schemes and Communication Models in WSNs”, Advisor: Prof. Noureddine Boudriga. Co-Advisor: Dr. Mohamed Hamdi. Higher School of Communication of Tunis, Tunisia. 2010.
- Chee Keong Ho, “Ultra Wideband Design Techniques for Wireless Medical Monitoring”, Advisor: Dr. Mehmet R. Yuce. Co-Advisor: Dr. Jamil Y. Khan. The University of Newcastle, Australia. 2011.
- José Cano Reyes, “Integrated Architecture for Configuration and Service Management in MANET Environments”, Advisors: Dr. Juan Carlos Cano Escribá and Dr. Carlos Tavares Calafate. Universidad Politecnica de Valencia (Spain). 2011.
- Vlado Menkovski. Computational inference and control of quality in multimedia services. Advisors: Prof. Antonio Liotta. TU/e (Netherlands). 2013.
- Declan T. Delaney. Serving Application Requirements in a Dynamic Wireless Sensor Network. Advisor: Prof. G. O'Hare. University College of Dublin (Ireland). 2014.
- Eman Mohammadi Nejad. “Simple and Complex Human Action Recognition in Constrained and Unconstrained Videos” Advisor: Dr. Jonathan Wu. University of Windsor. Feb 2018.
- Teemu Leppänen. “Resource-oriented Mobile Agent and Software Framework for the Internet of Things” Advisor: Prof. J. Riekk. University of Oulu (Finland), Mar 2018.
- Oscar Marcelo Zambrabo Vizuete, “Técnicas de Calidad Total aplicadas a los Sistemas de Gestión de Emergencias” Advisor: Prof. M. Esteve. Universitat Politecnica de Valencia (Spain). 2018.
- Zia Ush Shamszman, “A Social IoT Framework” Advisor: Dr. Ali M. Intizar. Insight Centre for Data analytics, NUI Galway. 2018.
- Yasir Saleem, “Social IoT-based Cross-Domain Application-to-Application Communications and Recommendation Services”, Advisors: Noel Crespi and Roberto Minerva, Service Architecture Lab, Wireless Networks and Multimedia Services Department, Institut Mines Telecom, Telecom SudParis, France. 2019 (expected)
- Muhammad Siddiqi, “Securing the Provenance of Wearable healthcare Sensing Data”, Advisor: Prof. Vijay Sivaraman, University of New South Wales in Sydney, Australia, 2019.
- Taiyang Wu, “Wearable and Implantable Sensor Systems with Energy Harvesting Techniques for IoT-Connected Healthcare Applications”, Advisor: Prof. Mehmet Yuce, Monash University, Melbourne, Australia, 2019.

### **National and International Committees for the Evaluation of Professorship Positions**

He participated to several national and international committees for promotion of professors at assistant, associate and full position.

### **International Committees for Assessment of Research Project Proposals**

He was/is in the reviewing committees (as reviewer) of some project frameworks/calls of the following research councils to evaluate research project proposals: National Science Foundation (USA), European Research Council (EU), Canadian Research Council (Canada), COST - European Cooperation in Science and Technology (EU), Saudi Arabia Research Council (SA), ARRS- Slovenian Research Agency (Slovenia), Estonian Research Council (Estonia).

## TEACHING ACTIVITY

He currently teaches several undergraduate and graduate level courses in the Computer Science at the University of Calabria: Fundamentals of Computer Science, Information Systems, Computing Systems, and Multimedia Systems. He also gave classes in Information and Communication Technology Masters, in Italy and abroad: wireless sensor networks, workflow management systems, mobile agents, and software engineering. He is very active in supervising graduating students in developing their bachelor and master degree theses.

He is currently the Director of the Postgraduate Master on INTER-IoT: Integrator and Manager of IoT Systems.

In particular, at University of Calabria, he taught the following courses.

| Academic Year | Courses  |
|---------------|--|
| 2019/20       | <ul style="list-style-type: none"> <li>- <i>Programming IoT Systems (module A: IoT Systems; module B: Wearable Computing)</i>, Master Level, Electronics/Computer Engineering Degree Courses.</li> <li>- <i>Computing systems architectures</i>, Bachelor Level, Electronics Engineering Degree Course.</li> <li>- <i>PhD Course: "From Modeling to Implementation of IoT Systems"</i>, co-teacher Dr. C. Savaglio, PhD in ICT, University of Calabria, Italy.</li> </ul>  |
| 2018/19       | <ul style="list-style-type: none"> <li>- <i>Programming IoT Systems (module A: IoT Systems; module B: Wearable Computing)</i>, Master Level, Electronics/Computer Engineering Degree Courses.</li> <li>- <i>Computer Science</i>, Master Level, Political and Social Sciences Degree Course.</li> <li>- <i>PhD Course: "From Modeling to Implementation of IoT Systems"</i>, co-teacher Dr. C. Savaglio, PhD in ICT, University of Calabria, Italy.</li> </ul>   |
| 2017/18       | <ul style="list-style-type: none"> <li>- <i>Programming Techniques for Embedded Systems and Sensor Networks</i>, Master and Bachelor Level, Electronics/Computer Engineering Degree Courses.</li> <li>- <i>Computer Programming Laboratory (Language C)</i>, Bachelor Level, Electronics Engineering Degree Course.</li> <li>- <i>Computer Science</i>, Master Level, Political and Social Sciences Degree Course.</li> </ul>  |
| 2016/17       | <ul style="list-style-type: none"> <li>- <i>Programming Techniques for Embedded Systems and Sensor Networks</i>, Master and Bachelor Level, Electronics/Computer Engineering Degree Courses.</li> <li>- <i>Computer Programming Laboratory (Language C)</i>, Bachelor Level, Electronics Engineering Degree Course.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Social Sciences Degree Course.</li> <li>- <i>PhD Course: "From Modeling to Implementation of Wearable Computing Systems based on Body Sensor Networks"</i>, co-teacher Dr. R. Gravina, PhD in ICT, University of Calabria, Italy.</li> </ul>            |
| 2015/16       | <ul style="list-style-type: none"> <li>- <i>Programming Techniques for Embedded Systems and Sensor Networks</i>, Master and Bachelor Level, Electronics/Computer Engineering Degree Courses.</li> <li>- <i>Computer Programming Laboratory (Language C)</i>, Bachelor Level, Electronics Engineering Degree Course.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course.</li> </ul>   |
| 2014/15       | <ul style="list-style-type: none"> <li>- <i>Programming Techniques for Embedded Systems and Sensor Networks</i>, Master and Bachelor Level, Electronics Engineering Degree Course.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course.</li> </ul>  |
| 2013/14       | <ul style="list-style-type: none"> <li>- <i>Advanced Computing Systems</i>, II module "Multimedia and Multi-sensorial Systems". Master Level, Computer Engineering Degree Course.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course.</li> <li>- <i>Informatics Systems for Tourism</i>, Master Level, Touristic Sciences Degree Course.</li> </ul>  |
| 2012/13       | <ul style="list-style-type: none"> <li>- <i>Fundamentals of Multimedia Systems</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Workflow Management Systems: process management and mining</i>, Master Level, Statistics and Computer Science for Economics and Finance Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Informatics Systems for Tourism</i>, Master Level, Touristic Sciences Degree Course, Faculty of Economics.</li> </ul> |
| 2011/12       | <ul style="list-style-type: none"> <li>- <i>Fundamentals of Multimedia Systems</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Informatics for Business</i>, Bachelor Level, Applied Economics Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Informatics Systems for Tourism</i>, Master Level, Touristic Sciences Degree Course, Faculty of Economics.</li> </ul>   |
| 2010/11       | <ul style="list-style-type: none"> <li>- <i>Management of Multimedia Data on Internet</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Programming Wireless Sensor Networks and Workflow Management Systems</i>, Fundamental Formative Seminars (3 hours each), Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Computing Systems</i>, Master Level, Statistics and Computer Science for Economics and Finance Degree Course, Faculty of Economics.</li> </ul>   |

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|         | <ul style="list-style-type: none"> <li>- <i>Informatics for Development</i>, Master Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> </ul>   |
| 2009/10 | <ul style="list-style-type: none"> <li>- <i>Management of Multimedia Data on Internet</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Programming Wireless Sensor Networks and Workflow Management Systems</i>, Fundamental Formative Seminars (3 hours each), Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Computing Systems 1</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> </ul>   |
| 2008/09 | <ul style="list-style-type: none"> <li>- <i>Management of Multimedia Data on Internet</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Programming Wireless Sensor Networks</i>, Fundamental Formative Seminars (3 hours each), Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Computing Systems 1</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Computing Systems 2</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>IT Laboratory</i>, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> </ul> |
| 2007/08 | <ul style="list-style-type: none"> <li>- <i>Management of Multimedia Data on Internet</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Programming Wireless Sensor Networks</i>, Fundamental Formative Seminars (3 hours each), Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Computing Systems 1</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Computing Systems 2</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>IT Laboratory</i>, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> </ul> |
| 2006/07 | <ul style="list-style-type: none"> <li>- <i>Management of Multimedia Data on Internet</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Computing Systems 1</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Computing Systems 2</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>IT Laboratory</i>, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> </ul>  |
| 2005/06 | <ul style="list-style-type: none"> <li>- <i>Management of Multimedia Data on Internet</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> <li>- <i>Information Systems</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Networked Computing Systems</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Databases</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>IT Laboratory</i>, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> </ul>                                      |
| 2004/05 | <ul style="list-style-type: none"> <li>- <i>Management of Multimedia Data on Internet</i>, Master Level, Computer Engineering Degree Course, Faculty of</li> </ul>   |

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|           | <p>Engineering.</p> <ul style="list-style-type: none"> <li>- <i>Information Systems</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Networked Computing Systems</i>, Bachelor Level, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>IT Laboratory</i>, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Seminars on Fundamentals of Computer Programming</i>, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> </ul>   |
| 2003/04   | <ul style="list-style-type: none"> <li>- <i>Information Systems</i>, Bachelor and Master Level, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>IT Laboratory</i>, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Seminars on Fundamentals of Computer Programming</i>, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> </ul>   |
| 2002/03   | <ul style="list-style-type: none"> <li>- <i>Information Systems</i>, Bachelor and Master Level, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Databases 2</i>, Bachelor and Master Level, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>IT Laboratory</i>, Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Seminars on Fundamentals of Computer Programming</i>, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> </ul> |
| 2001/02   | <ul style="list-style-type: none"> <li>- <i>Information Systems</i>, Bachelor and Master Level, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> <li>- <i>Fundamentals of Computing Science and IT Laboratory</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Information Systems</i>, Bachelor Level, Economics and Social Sciences Disciplines Degree Course, Faculty of Economics.</li> <li>- <i>Seminars on Fundamentals of Computer Programming</i>, Statistics Degree Course and Quantitative Methods for Economics and Management Degree Course, Faculty of Economics.</li> </ul>   |
| 2000/01   | <ul style="list-style-type: none"> <li>- <i>Fundamentals of Computer Programming</i>, Master Level, Engineering Degree Courses, Faculty of Engineering.</li> <li>- <i>Seminars on Computing Systems</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> </ul>  |
| 1999/2000 | <ul style="list-style-type: none"> <li>- Teaching assistant of <i>Fundamentals of Computer Programming</i>, Master Level, Engineering Degree Courses, Faculty of Engineering.</li> <li>- <i>Seminars on Computing Systems</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> </ul>  |
| 1998/99   | <ul style="list-style-type: none"> <li>- Teaching assistant of <i>Fundamentals of Computer Programming</i>, Master Level, Engineering Degree Courses, Faculty of Engineering.</li> <li>- <i>Seminars on Computing Systems</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> </ul>  |
| 1997/98   | <ul style="list-style-type: none"> <li>- Teaching assistant of <i>Fundamentals of Computer Programming</i>, Master Level, Engineering Degree Courses, Faculty of Engineering.</li> <li>- <i>Seminars on Computing Systems</i>, Master Level, Computer Engineering Degree Course, Faculty of Engineering.</li> </ul>  |

Moreover, he taught the following courses (Master and PhD level) in international Institutions:

| Date      | Courses  |
|-----------|--|
| Feb, 2019 | “Wireless Sensor Network Systems and Applications”, <i>Master en tecnologías sistema y redes de comunicacion</i> ”, Department of Communications, Universidad Politecnica de Valencia (Spain). |
| Mar, 2018 | “Wireless Sensor Network Systems and Applications”, <i>Master en tecnologías sistema y redes de comunicacion</i> ”, Department of Communications, Universidad Politecnica de Valencia (Spain). |
| Jun, 2017 | “Wireless Sensor Network Systems and Applications”, School of Logistics Engineering, Wuhan University of Technology, China.  |
| Apr, 2017 | “Wireless Sensor Network Systems and Applications”, <i>Master en tecnologías sistema y redes de comunicacion</i> ”, Department of Communications, Universidad Politecnica de Valencia (Spain). |

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| Jan, 2017        | “From Modeling to Implementation of Wearable Computing Systems based on Body Sensor Networks”, co-teacher Dr. R. Gravina, PhD in ICT, University of Calabria, Italy.                                    |
| Apr, 2016        | “Wireless Sensor Network Systems and Applications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain).           |
| Jun, 2015        | "Mobile agents and their applications in Sensor Networks", School of Logistics Engineering, Wuhan University of Technology, China.  |
| Feb, 2015        | “Wireless Sensor Network Systems and Applications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain).           |
| Mar, 2014        | “Mobile agents and their applications in Telecommunications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain). |
| Apr, 16-18, 2013 | “Mobile agents and their applications in Telecommunications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain). |
| Mar, 26-28, 2012 | “Mobile agents and their applications in Telecommunications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain). |
| Mar, 7-9, 2011   | “Mobile agents and their applications in Telecommunications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain). |
| Apr, 26-27, 2010 | “Mobile agents and their applications in Telecommunications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain). |
| Apr, 27-29, 2009 | “Mobile agents and their applications in Telecommunications”, <i>Master en tecnologias sistema y redes de comunicacion</i> , Department of Communications, Universidad Politecnica de Valencia (Spain). |



## INTERNATIONALIZATION ACTIVITY

He was/is very active in promoting the establishment of teaching/research agreements between University of Calabria and foreign international Universities. He is currently the delegate to the international activities of the DIMES department. In the following, the promoted signed agreements are listed and commented.

| University   | Agreement Type  | Years                          |
|--|---|--------------------------------|
| Queensland University of Technology (QUT), Brisbane, Australia                       | - General Framework Agreement<br>- Student Exchange Agreement<br>- Joint PhD Agreement  | 2009-2012                      |
| TU/e, Eindhoven, The Netherlands   | - Erasmus Agreement<br>- General Framework Agreement<br>- Joint PhD Agreement   | 2010-2013                      |
| Universitat Politecnica de Valencia, Valencia, Spain                                 | - Erasmus Agreement   | 2002-2013                      |
| University of Reading, UK  | - Erasmus Agreement<br>- General Framework Agreement with UNICAL Faculty of Engineering for Research Master Students Exchange | 2010-2013                      |
| UT Dallas, USA   | - General Framework Agreement with UNICAL Faculty of Engineering for Research Master Students Exchange                        | 2011                           |
| WSN Lab Berkeley, USA  | - General Framework Agreement with UNICAL Faculty of Engineering for Research Master Students Exchange                        | 2007-2010                      |
| Technical University of Berlin, Germany  | - One-off Agreement for MSc-level Research Thesis   | 2010                           |
| Wuhan University of Technology, Wuhan City, China                                    | - General Framework Agreement<br>- Joint Lab on IoT Technologies  | 2011-2015<br>renewed till 2018 |
| University of Craiova, Craiova, Romania  | - Erasmus Agreement   | 2011-2013                      |
| Warsaw Management University, Warsaw, Poland   | - Erasmus Agreement   | 2011-2013                      |
| University of Gdask, Gdansk, Poland  | - Erasmus Agreement   | 2011-2013                      |
| University College of Dublin, Dublin, Ireland  | - Erasmus Placement Agreement   | 2010-2011                      |
| Universidad Autonoma de Madrid   | - Erasmus Placement Agreement   | 2012-                          |
| National Higher School of IT (ENSIAS) - Mohamed 5 Souissi University, Rabat, Morocco | - General Framework Agreement   | 2012-                          |
| Abdelmalek Essaadi University, Tetuan, Morocco                                       | - General Framework Agreement   | 2011-                          |
| University of Chile, Santiago, Chile   | - General Framework Agreement   | 2013-                          |
| Washington State University, Pullman, USA  | - General Framework Agreement   | 2015-                          |
| Technical University of Compiegne, France  | - Erasmus+ Agreement  | 2015-                          |
| University of Koblenz, Germany   | - Erasmus+ Agreement  | 2015-                          |

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|--|--|----------------------|
| Bochum University of Applied Sciences, Germany                       | - Erasmus+ Agreement   | 2017-                |
| National Research University of Electronic Technology – MIET, Russia | - General Framework Agreement<br>- Dual-degree (in itinere)  | 2017 -               |
| Coimbra Institute of Engineering, Portugal                           | - General Framework Agreement<br>- Dual-degree (agreement in itinere)                              | Agreement in itinere |
| Shanghai Maritime University (China)                                 | - General Framework Agreement<br>- Joint Lab on IoT Technologies oriented Smart Port               | Nov. 2017-           |
| Carleton University (Canada)   | - General Framework Agreement<br>- Joint-PhD (upon request)  | Jan 2018 -           |
| Institut Mines-Telecom (France)                                      | - Erasmus+ Agreement<br>- Dual-degree (agreement in itinere)<br>- Joint-PhD (agreement in itinere) | Mar 2018 -           |
| University of Derby (UK)   | - Erasmus+ Agreement   | 2018 -               |
| University of Oulu (Finland)   | - Erasmus+ Agreement<br>- Dual-degree (agreement in itinere)                                       | Mar 2018 -           |
| Ecole Nationale d'Ingénieurs de Brest (ENIB), France                 | - Erasmus+ Agreement   | Apr 2018 -           |
| “GHEORGHE ASACHI” TECHNICAL UNIVERSITY OF IASI, Romania              | - Erasmus+ Agreement   | May 2018 -           |
| Shenzhen Institute for Advanced Technologies (SIAT), China           | - One-off Agreement for MSc-level Research Thesis  | Jun 2018             |
| New York University (USA)  | - One-off Agreement for MSc-level Research Thesis  | Jul 2018             |
| Linköping University, Sweden   | - Erasmus+ Agreement   | Dec 2018-            |
| Northeastern University Boston (USA)                                 | - General Framework Agreement  | May 2019-            |
| Huazhong Agriculture University (China)                              | - General Framework Agreement<br>- Joint Lab on IoT Technologies oriented to Smart Agriculture     | Nov. 2019-           |

## PUBLICATIONS

### International Journals

- |      |   | Indexing |
|------|---|----------|
| [1]  | G. Fortino, D. Grimaldi, L. Nigro, "Multicast Control of Mobile Measurement Systems", in <i>IEEE Transactions on Instrumentation and Measurements</i> , vol.47, n. 21, pp.1149-1154, IEEE Instrumentation and Measurement Society, Piscataway (NJ), USA, Oct. 1998.   | ISI      |
| [2]  | G. Fortino, L. Nigro, "Development of Virtual Data Acquisition Systems based on Multimedia Internetworking", in <i>Computer Standards &amp; Interfaces</i> , vol. 21, pp. 429-440, Elsevier, Amsterdam, The Netherlands, 1999.  | ISI      |
| [3]  | G. Fortino, L. Nigro, "ViCRO: an interactive and cooperative videorecording on demand system over Internet Mbone", in <i>Informatica – an international journal of computing and informatics</i> , vol. 24, n.1, pp.97-105, Mar. 2000.  | SCOPUS   |
| [4]  | G. Fortino, L. Nigro, "A Toolset in Java2 for Modeling, Prototyping and Implementing Communicating Real-Time State Machines", in <i>Microprocessors and Microsystems</i> , Vol. 23, n.10, pp. 573-586, Elsevier, Amsterdam, The Netherlands, Mar. 2000.   | ISI      |
| [5]  | G. Fortino, W. Russo, "The Virtual Video Gallery: a user-centred media on-demand system", in <i>Journal of Interactive Technology and Smart Education</i> , Vol. 1, n. 1, pp.29-40, Feb. 2004.  | Inspec   |
| [6]  | G. Fortino, W. Russo, E. Zimeo, "A Statecharts-based Software Development Process for Mobile Agents", in <i>Information and Software Technology</i> , Vol. 46, n. 13, pp. 907-921, Elsevier, Amsterdam, The Netherlands, Oct. 2004.   | ISI      |
| [7]  | G. Fortino, A. Garro, W. Russo, "Modelling and Analysis of Agent-Based Electronic Marketplaces", in <i>IPSI Transactions on Internet Research</i> , Vol.1, n.1, pp. 24-33, Jan. 2005.   | N/A      |
| [8]  | G. Fortino, C. Mastroianni, W. Russo, "Cooperative Control of Multicast-based Streaming On-Demand Systems", in <i>Future Generation Computer Systems The International Journal of Grid Computing: Theory, Methods and Applications</i> , Vol. 21, n. 5, pp. 823-839, Elsevier, Amsterdam, The Netherlands, May 2005.  | ISI      |
| [9]  | G. Fortino, A. Garro, W. Russo, "An Integrated Approach for the Development and Validation of Multi Agent Systems", in <i>Computer Systems Science &amp; Engineering</i> , Vol. 20, n. 4, pp. 94-107, CRL Publishing Ltd., Leicester (UK), Jul. 2005.   | ISI      |
| [10] | M. Esteve, G. Fortino, B. Molina, C. Palau, "A Streaming Content Distribution Network for e-Learning", in <i>International Journal of Interactive Technology and Smart Education, special issue on Streaming Content Distribution Networks for e-Learning and e-Entertainment</i> , 3(1), pp. 9-20, 2006.   | Inspec   |
| [11] | G. Fortino, C. Palau, W. Russo, "Collaborative Control of Media Playbacks in SCDNs", in <i>International Journal of Interactive Technology and Smart Education, special issue on Streaming Content Distribution Networks for e-Learning and e-Entertainment</i> , Vol. 3, n. 1, pp. 21-30, 2006.  | Inspec   |
| [12] | G. Fortino, W. Russo, C. Mastroianni, C.E. Palau, M. Esteve, "CDN-supported Collaborative Media Streaming Control" <i>IEEE Multimedia Magazine</i> , 14(2), pp. 60-71, 2007.  | ISI      |
| [13] | G. Fortino, A. Garro, W. Russo, "Achieving Mobile Agent Systems Interoperability through Software Layering" In <i>Information and Software Technology, Elsevier</i> , 50(4), pp. 322-341, 2008.   | ISI      |
| [14] | G. Fortino, W. Russo, "Using P2P, GRID and Agent Technologies for the Development of Content Distribution Networks" in <i>Future Generation Computer Systems The International Journal of Grid Computing: Theory, Methods and Applications, special issue on Enhancing Content Networks with P2P, GRID and Agent Technologies</i> (G. Fortino and C. Mastroianni, eds), 24(3), pp. 180-190. Elsevier, Amsterdam, The Netherlands, 2008. | ISI      |
| [15] | M. Cossentino, G. Fortino, A. Garro, S. Mascillaro, W. Russo, "PASSIM: A Simulation-based Process for the Development of Multi-Agent Systems" in <i>International Journal on Agent Oriented Software Engineering, special issue on Multi-Agent Systems and Simulation</i> (M. Cossentino, G. Fortino, and W. Russo, eds), Inderscience, 2(2), pp. 132-170, 2008.  | SCOPUS   |
| [16] | G. Fortino, C. Mastroianni, W. Russo, "A Hierarchical Control Protocol for Group-Oriented Playbacks Supported by Content Distribution Networks," <i>Journal of Network and Computer</i>   | ISI      |

*Applications, Elsevier 32(1), pp. 135-157, 2009.*

- [17] G. Fortino, A. Garro, S. Mascillaro, W. Russo, "Using Event-driven Lightweight DSC-based Agents for MAS Modeling," in the special issue "Best of From Agent Theory to Agent Implementation 6 (AT2AI-6)", *International Journal on Agent Oriented Software Engineering (Inderscience)*, 4(2), 2010. SCOPUS
- [18] G. Fortino, S. Galzarano, R. Giannantonio, R. Gravina, A. Guerrieri, "SPINE-based Application Development on Heterogeneous Wireless Body Sensor Networks". *International Journal of Computing*, 9(1), p. 80-89, 2010. ISSN: 1727-6209. N/A
- [19] F. Aiello, G. Fortino, R. Gravina, A. Guerrieri, "A Java-based Agent Platform for Programming Wireless Sensor Networks" *The Computer Journal*, 54(3), pp.439-454, 2011. doi: 10.1093/comjnl/bxq019. ISI
- [20] F. Bellifemine, G. Fortino, R. Giannantonio, R. Gravina, A. Guerrieri, M. Sgroi, "SPINE: A domain-specific framework for rapid prototyping of WBSN applications" *Software Practice and Experience*, 41(3), 2011, pp. 237-265. Wiley. DOI:10.1002/spe. ISI
- [21] F. Aiello, F. Bellifemine, S. Galzarano, R. Gravina, and G. Fortino "An agent-based signal processing in-node environment for real-time human activity monitoring based on wireless body sensor networks". *Journal of Engineering Applications of Artificial Intelligence*, 24(7), pp. 1147-1161, 2011. Elsevier. DOI: 10.1016/j.engappai.2011.06.007 ISI
- [22] F. Aiello, G. Fortino, S. Galzarano, R. Gravina, A. Guerrieri, "An Analysis of Java-based Mobile Agent Platforms for Wireless Sensor Networks". *Multi-Agent and Grid Systems Journal*, Vol. 7(6), pp. 243-267, IOS Press. 2011. DOI: 10.3233/MGS-2011-0175 SCOPUS
- [23] S. Galzarano, G. Fortino, A. Liotta, "A Task-based Architecture for Autonomic Body Sensor Networks", *International Transactions on Systems Science and Applications*, Vol. 7, No. 1/2, November 2011, pp. 140-151 (ISSN 1751-1461). N/A
- [24] C. T. Calafate, G. Fortino, S. Fritsch, J. Monteiro, J-C. Cano, P. Manzoni "An efficient and robust content delivery solution for IEEE 802.11p vehicular environments", *Journal of Network and Computer Applications*, 35(2), 753-762, Elsevier, 2012. DOI: 10.1016/j.jnca.2011.11.008. ISI
- [25] N. Raveendranathan, S. Galzarano, V. Loseu, R. Gravina, R. Giannantonio, M. Sgroi, R. Jafari, G. Fortino, "From Modeling to Implementation of Virtual Sensors in Body Sensor Networks". *IEEE Sensors Journal*, 12(3), 583-593, 2012. DOI:10.1109/JSEN.2011.2121059. ISI
- [26] G. Fortino and W. Russo, "ELDAMeth: An Agent-oriented Methodology For Simulation-based Prototyping of Distributed Agent Systems". *Information and Software Technology*, 54(6), 608-624, 2012. DOI: 10.1016/j.infsof.2011.08.006. ISI
- [27] G. Fortino and F. Rango, "An Application-level Technique based on Recursive Hierarchical State Machines for Agent Execution State Capture", *Science of Computer Programming*, 78(6), pp. 725-746, Jun. 2013. DOI:10.1016/j.scico.2011.10.001. ISI
- [28] G. Fortino, F. Rango, W. Russo, "Engineering Multi-Agent Systems through Statecharts-based JADE agents and tools". in *Transactions on Computational Collective Intelligence*, Vol. LNCS 7270, n. VII, pp. 61-81, Springer, 2012. SCOPUS
- [29] G. Fortino, A. Guerrieri, "Decentralized Management of Building Indoors through Embedded Software Agents," *Computer Science and Information Systems (ComSIS) The international journal published by ComSIS Consortium*, Vol. 9, N. 3, 1331-1359. DOI:10.2298/CSIS120101030F. 2012. ISI
- [30] A. Guerrieri, G. Fortino, A. Ruzzelli, G. O'Hare, "A Flexible Building Management Framework based on Wireless Sensor and Actuator Networks", *Journal of Network and Computer Applications*, Elsevier, 35(6), 1934-1952. 2012. DOI:10.1016/j.jnca.2012.07.016. ISI
- [31] G. Fortino, R. Giannantonio, R. Gravina, P. Kuryloski, R. Jafari, "Enabling Effective Programming and Flexible Management of Efficient Body Sensor Network Applications", *IEEE Transactions on Human-Machine Systems*, vol. 43, no. 1, pp. 115-133, Jan. 2013. DOI: 10.1109/TSMCC.2012.2215852  
(from Web of Science Core Collection) **Highly Cited Paper: As of December 2018, this highly cited paper received enough citations to place it in the top 1% of the academic field of Engineering based on a highly cited threshold for the field and publication year.** ISI

- [32] G. Fortino, W. Russo, M. Vaccaro, "An agent-based approach for the design and analysis of content delivery networks," *Journal of Network and Computer Applications*, Vol. 37, January 2014, pp. 127-145, doi:10.1016/j.jnca.2012.11.005. ISI
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