

Educator in Chief



Chonggang Wang received his Ph.D. degree from Beijing University of Posts and Telecommunications (BUPT) in 2002. He is currently a Member Technical Staff with InterDigital Communications. His current research interests include decentralized IoT, semantic computing and services for IoT, fog computing for IoT, IoT data analytics, and advanced IoT services. He also has abundant IoT standardization experience including oneM2M, IETF, IEEE, and ETSI TC M2M. He was the co-founder (2011-2013) and the founding Editor-in-Chief (EiC) of IEEE Internet of Things Journal (2014-2016). He is currently the Associate EiC of IEEE Transactions on Big Data and the EiC of IEEE Blockchain Technical Briefs. He is an IEEE Fellow for his contributions to IoT enabling technologies (2017).

Technical Editors – IoT Communications



Igor Bisio got his Master Degree, in Telecommunication Engineering, at the University of Genoa, Italy in 2002 and his Ph.D. degree in Information and Communication Sciences and Technologies in the same University in 2006. He is currently Associate Professor and he is member of the Telecommunication Research Group and, in particular, he is co-responsible for the Digital Signal Processing (DSP) Laboratory at the University of Genoa. During his research activity, he is collaborating, in the framework of research projects, with several industries in the ICT field such as TIM S.p.A., Leonardo S.p.A., with several SMEs and he is also technical consultant of several private and public institutions.

He is an IEEE Communications Society (ComSoc) Member, he was Chair of the IEEE ComSoc Satellite and Space Communications Technical Committee. He is also an IEEE Signal Processing (SPS), IEEE Aerospace and Electronic Systems and IEEE Computers Societies member. He served as Treasurer of the IEEE SPS Italian Chapter and is member of the Special Interest Group about Internet of Things of the IEEE SPS.

He is the author of around 120 papers including journals, conferences and book chapters. He is recipient of several Awards. He is Associate Editor of the IEEE Internet of Things Journal, IEEE Transactions on Vehicular Technologies, IEEE Access, IEEE Network and Digital Communications and Networks Journals. He has also organized Special Issues of International Journals and Magazines (such as, among the others, IEEE Communications Magazine) and he has been Technical Committee Co-Chair of many international conferences including IEEE Globecom, IEEE ICC, and IEEE Vehicular Technology Conference.

His research concerns Signal Processing over Internet of Things, Context and Location Awareness, Adaptive Coding, Safety and e-health Applications, Satellite Communication systems. In more detail,

concerning the IoT related topics developed in his research activity, they deal, in general, with Ambient Intelligence in the IoT. In particular, my research concerns: intelligent and distributed signal processing and information fusion for context-awareness in the IoT; Cross-layer processing for IoT; Human-cyber-physical interaction; experimental prototypes and test-beds experiences on smart services and applications in field such as smart cities, smart buildings, assisted living and e-health.



Dr. Soumaya Cherkaoui is a Full Professor at Department of Electrical and Computer Engineering of Université de Sherbrooke, Canada which she joined as a faculty member in 1999. Her research and teaching interests are in wireless networks. Particularly, she works on next generation networks (5G and beyond), Edge computing/Network Intelligence, and communication networks for verticals such as Connected and Autonomous Cars, IoT, and Industrial IoT. Since 2005, she has been the Director of INTERLAB, a research group which conducts research funded both by government and industry. Before joining U. Sherbrooke, she worked for industry as a project leader on projects targeted at the Aerospace Industry. Pr. Cherkaoui has held

invited positions at leading institutions including the University of California at Berkeley, Bell Laboratories, Monash University, and the University of Toronto, as well as an adjunct position at Lulea University, in Sweden.

Pr. Cherkaoui avails of a long research experience in wireless networking. Her work resulted in technology transfer to companies and to patented technology. She has delivered several keynote addresses and invited talks in the area. Pr. Cherkaoui has published over 200 research papers in reputed journals and conferences. She co-edited 7 books and collective works, has been an associate editor and guest editor of several IEEE, Wiley and Elsevier Journals. Her work was awarded with recognitions and best paper awards including a best paper award at the IEEE Communications Society Flagship conference IEEE ICC in 2017. She has chaired prestigious conferences such as IEEE LCN 2019, and has served as a symposium co-chair for flagship conferences including IEEE ICC 2018, IEEE Globecom 2018, IEEE Globecom 2015, IEEE ICC 2014, and IEEE PIMRC 2011. She is a Professional Engineer in Canada, a senior IEEE Member, and is serving as the Chair of the IEEE Communications Society IoT-Ad hoc and Sensor Networks Technical Committee since 2020.



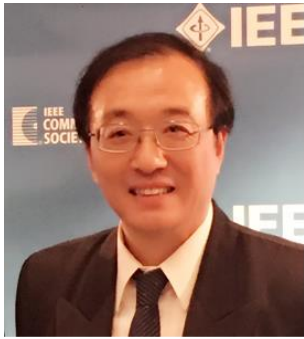
Reza Malekian is Professor of Computer Science at Malmö University, Sweden and an Extraordinary Professor in the Department of Electrical, Electronic, and Computer Engineering at University of Pretoria, South Africa, where he previously led the Advanced Sensor Networks research group and received the Exceptional Young Researcher's award from Vice-Chancellor. His research focuses on the Internet of Things, connectivity, and sensor networks. He is registered as a chartered engineer (CEng) with the Engineering Council of UK, a senior member of the IEEE, a senior member of the ACM, and a Fellow of the British Computer Society, The Chartered Institute for IT.

Having several years' experience in teaching and research in both the university and the industry sectors, he has maintained an active research programme and provided supervision and mentorship to several doctoral graduates, postdoctoral fellows, and senior researchers under the industry and government funding. He has also chaired doctoral thesis defenses and defense committee and has been appointed as assessment committee member for PhD theses in various universities and research institutions.

Dr. Malekian has been serving as an Associate Editor for IEEE Transaction on Intelligent Transportation Systems, and IEEE Internet of Things Journal (2016-2020) and has been involved in the organizing committee of the relevant IoT conferences including General co-Chair of IEEE 5G Summit Pretoria, TPC co-Chair of the IEEE International Conference on Industrial Internet (ICII) and IEEE Wireless Africa Conference, invited speaker co-Chair of the IEEE International Conference on Computing, Networking and Communications (ICNC) and Best Paper Award Committee of the International Conference on Neural Computing for Advanced Applications.

He was also a guest editor for IEEE Transactions on Network Science and Engineering, IEEE Transactions on Intelligent Transportation Systems, IEEE Intelligent Transportation Magazine, IEEE Sensors Journal, IEEE Transactions on Multimedia, and Elsevier Computer Networks.

His standing in this field is demonstrated by more than 180 publications including peer-reviewed articles, conference papers, book and book chapters and some of the papers he co-authored have received awards at IEEE conferences and are ranked as highly cited papers among the top 1% in the Web of Science based on the highly cited threshold for the academic field.



Rulei Ting has been with AT&T & Bell Labs in New Jersey USA for 20+ years, with responsibilities from Distinguished MTS to Senior Technical Director. He contributed to the successes of FT2000 that became an outstanding technology and industry success and delivered multi-billion dollars revenue. He pioneered AT&T's business development in Asia-Pacific region. He also served as Senior Director in telecommunication equipment start-ups. Most recently, Rulei has been a director and an architect of Software-Defined Networking and Network Function Virtualization at AT&T. Rulei is a recipient of the 2019 Asian American Engineer of the Year Award; AT&T Bell Labs President Award; IEEE Millennium Award; IEEE Region-1 Award. He holds

two US patents.

Over the past 15 years, Rulei has volunteered as a ComSoc Chapter Chair, IEEE New Jersey Coast Section ExCom, and led ComSoc's Engineering Certification and Education efforts. Being the Ad hoc WCET Committee Chair, he was instrumental in motivating a global team of volunteers developing the exam items, constructing the exams, as well as setting up the strategies and launching partnership efforts. As a result, his team received ComSoc Global Chapter Achievement Award 2003; his team efforts led to the financial turnaround of WCET programs. Dr. Ting also served on IEEE ComSoc's Education and Professional Training Board for the past six years. He served on the IEEE ComSoc Board of Governors as Director of Educational Services in 2016 and 2017, and the industry engagements that led to ComSoc being awarded with IEEE EAB Society/Council Professional Development Award in 2017.

Dr. Ting served on the Operations Committee as Industrial Liaison for IEEE ICC 2019 in Shanghai as a Co-Chair of Patron. He also served as the Chair of Industry Training of IEEE Globecom 2019 in Hawaii. Dr. Ting is the Co-Chair of Education of IEEE Future Directions. He has been awarded with The President's Volunteer Service Gold Award of USA.

Rulei Ting earned B.S. from Shanghai Jiao Tong University, Shanghai, China; Ph.D. from CUNY, New York City, USA. Dr. Ting earned Executive Master's in Technology Management at Wharton and Penn Engineering of University of Pennsylvania, Philadelphia, USA.



Nizar Zorba (IEEE senior member) is a Professor at the Electrical Engineering department at Qatar University, Doha, Qatar. Dr. Zorba received the B.Sc. degree in electrical engineering from JUST University, Jordan, in 2002, and the Ph.D. degree in signal processing for communications from UPC Barcelona, Spain, in 2007. He has authored five international patents, two books and co-authored over 130 papers in peer-reviewed journals and international conferences. Dr. Zorba is associate/guest editor for the IEEE Communications Letters, IEEE Access, Springer/Eurasip Journal on Wireless Communications and Networking, IEEE Communications Magazine and IEEE Network. He is symposium chair at IEEE Globecom 2021, IEEE VTC 2020 and IEEE ICC 2019; Workshop chair at IWCMC 2020 and CSM-PS 2019; and competitions chair at IEEE ICIoT 2020. Currently, he is the vice-chair of the IEEE ComSoc Communication Systems Integration and Modeling Technical Committee (TC CSIM).

Technical Editor – AI for IoT



Ruidong Li is a senior researcher at the National Institute of Information and Communications Technology (NICT), Tokyo. He received the M.Sc. degree and Ph.D. degree in computer science from the University of Tsukuba in 2005 and 2008, respectively. He currently serves as the Secretary of Internet Technical Committee (ITC) in IEEE communications society, and is the founder and chair of IEEE SIG on Big Data Intelligent Networking and IEEE SIG on Intelligent Internet Edge. He was vice chair for IEEE Tokyo young professionals and the co-chair of a young research group for Asia future Internet forum. He is the associate editor of IEEE Internet of Things Journal (2020-present) and Digital Communications and Networks (Elsevier), and also served as the guest editors

for a set of prestigious magazines, transactions, and journals, such as IEEE communications magazine, IEEE network, IEEE Trans. On Network Science and Engineering, EURASIP Journal on Wireless Communications and Networking, Journal of Network and Systems Management, ETT Transactions, and IEICE special issues. He also served as chairs for several conferences and workshops, such as the general co-chair for IEEE INFOCOM 2019/2020 ICCN workshop, PC co-chair for ICC 2021 NGNI symposium, IEEE MSN 2020, BRAINS 2020, IEEE ICDCS 2019/2020 NMIC workshop, and IEEE Globecom 2019 ICSTO workshop. His research interests include future networks, Internet of things, big data networking, intelligent Internet edge, quantum Internet, network security, information-centric network, artificial intelligence, cyber-physical system, and wireless networks. He is a senior member of IEEE and a member of IEICE.

Technical Editor – IoT Computing Platforms



Enzo Mingozzi is a full professor at the Department of Information Engineering of the University of Pisa, Italy. He received a Laurea (cum laude) degree and a PhD in Computer Systems Engineering in 1995 and 2000, respectively, from the same university.

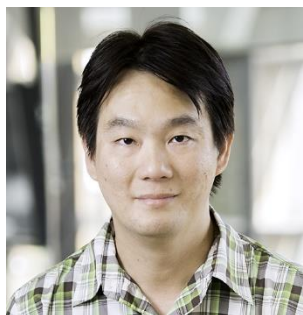
His research activities span several areas, including resource optimization in wireless and wired networks, Mobile Edge/Fog Computing and the Internet of Things. He has been involved in several national (FIRB, PRIN) and international (Eurescom, EU) projects, as well as research projects supported by private industries (Telecom Italia Lab, Nokia, and Nokia Siemens Networks). He also actively took part in the standardization process of HIPERLAN/2 and HIPERACCESS networks in the

framework of the ETSI project Broadband Radio Access Networks (BRAN). He is co-author of >130 peer-reviewed papers in international journals and conference proceedings, five book chapters and ten patents.

He is currently serving on the Editorial Board of Computer Networks (Elsevier), Computer Communications (Elsevier), and Ad Hoc & Sensor Wireless Networks (Old City Publishing). Previously, he has served on the Editorial Board of the Internet of Things Journal (IEEE). He was also guest editor of a few journal special issues on topics related to wireless and mobile networks. He served in the organizing and technical program committee of several international conferences, and was co-founder of the IEEE IoT-SoS and IEEE InThingS workshops.

He has taught several courses (regular classes as well as seminars) related to advanced networking and IoT technologies and platforms. Since 2017 he is Chair of the Board of the Computer Engineering bachelor and master's degree programmes of the University of Pisa.

Technical Editor – IoT Security



Kim-Kwang Raymond Choo received the Ph.D. in Information Security in 2006 from Queensland University of Technology, Australia. He currently holds the Cloud Technology Endowed Professorship at The University of Texas at San Antonio (UTSA). He serves as the Associate Editor-in-Chief of Human-centric Computing and Information Sciences; Department Editor of IEEE Transactions on Engineering Management; Associate Editor of Computers & Electrical Engineering, IEEE Access, and IEEE Transactions on Big Data; Associate Technical Editor of IEEE Communications Magazine; Editor of Future Generation Computer Systems; and on the Editorial Board of

Computers & Security, Cluster Computing, IEEE Blockchain Technical Briefs, IEEE Internet of Things Journal, and Journal of Network and Computer Applications.

He has also reviewed for L'Oréal-UNESCO For Women in Science 2021 International Awards (Physical sciences, Mathematics and computer science), and Canada Research Chairs Program (Tier 1 Chair – 2019), etc. In 2015, he and his team won the Digital Forensics Research Challenge organized by Germany's University of Erlangen-Nuremberg. He is the recipient of the 2019 IEEE Technical Committee on Scalable Computing (TCSC) Award for Excellence in Scalable Computing (Middle Career Researcher), 2018 UTSA College of Business Col. Jean Piccione and Lt. Col. Philip Piccione Endowed Research Award for Tenured Faculty, British Computer Society's 2019 Wilkes Award Runner-up, 2019 EURASIP Journal on Wireless Communications and Networking Best Paper Award, Korea Information Processing Society's JIPS Survey Paper Award (Gold) 2019, IEEE Blockchain 2019 Outstanding Paper Award, Inscrypt 2019 Best Student Paper Award, IEEE TrustCom 2018 Best Paper Award, ESORICS 2015 Best Research Paper Award, 2014 Highly Commended Award by the Australia New Zealand Policing Advisory Agency, Fulbright Scholarship in 2009, 2008 Australia Day Achievement Medallion, and British Computer Society's Wilkes Award in 2008.

Technical Editor – IoT Standards



JaeSeung Song is an associate professor, leading the Software Engineering and Security group (SESlab) in the Computer and Information Security Department at Sejong University. He received a PhD at Imperial College London in the Department of Computing, United Kingdom. He holds BS and MS in Computer Science from Sogang University. He holds the position of oneM2M Technical Plenary Vice and a director on IoT platforms at KICS. Prior to his current position, he worked for NEC Europe Ltd. between 2012 and 2013 as a leading standard senior researcher. At that time, he actively participated in IoT related R&D projects such as the Building as a Service (BaaS) FP 7 project and IoT/M2M standardizations (i.e., ETSI TC M2M and oneM2M). From 2002 to 2008, he worked for LG Electronics as a senior researcher leading a 3GPP SA standard team. He occupied leadership positions in 3GPP and oneM2M standard groups as a rapporteur and active contributor.

He is the co-author and co-inventor of over 100 international publications, conference papers and patent applications. His research interests span the areas of software engineering, networked systems and security, with focus on the design and engineering of reliable IoT/M2M platforms, particularly in the context of semantic IoT data interoperability, secure software patch techniques and data analytics using machine learning. He also holds leadership roles (series editor and TPC co-chair) in several journals and conferences such as an associate editor of IEEE IoT journal, IoT series editor of IEEE Communications Standards Magazine and TPC Co-Chair of IEEE Conference on Standards for Communications and Networking.

Technical Editors – IoT Devices



Sasitharan Balasubramaniam (Senior Member, IEEE) received the B.E. degree in electrical and electronic engineering from the University of Queensland, Brisbane, QLD, Australia, in 1998, the M.E. in computer and communication engineering from the Queensland University of Technology, Brisbane, in 1999, and the Ph.D. degree from the University of Queensland, in 2005. He is currently the Director of Research with the Telecommunication Software and Systems Group, Waterford Institute of Technology, Waterford, Ireland. He has authored or co-authored more than 100 articles in various journals and conferences, and actively participates in a number of technical program committees for various conferences. His current research interests includes molecular communications, Internet of (Bio) NanoThings, and Terahertz Wireless Communications. He is currently on the Steering Board Committee of ACM NanoCom, which he co-founded. In 2018, he was the IEEE Nanotechnology Council Distinguished Lecturer. He was an Associate Editor of the *IEEE Internet of Things Journal*. He is currently an Associate Editor for the *IEEE Transactions on Molecular, Biological and Multi-Scale Communications*, *IEEE Letters of the Computer Society*, Elsevier Nano Communication Networks, and Elsevier Digital Communication and Networks.



Professor Shiyan Hu received his Ph.D. in Computer Engineering from Texas A&M University in 2008. He is the Professor and Chair in Cyber-Physical System Security at University of Southampton. His research interests include Cyber-Physical Systems and Cyber-Physical System Security, where he has published more than 100 refereed papers. Prof. Hu is an ACM Distinguished Speaker, an IEEE Systems Council Distinguished Lecturer, a recipient of the 2017 IEEE Computer Society TCSC Middle Career Researcher Award, and a recipient of the 2014 U.S. National Science Foundation (NSF) CAREER Award. His publications have received distinctions such as the 2018 IEEE Systems Journal Best Paper Award, the 2017 Keynote Paper in IEEE

Transactions on Computer-Aided Design, the Front Cover Paper in IEEE Transactions on Nanobioscience in March 2014, multiple Thomson Reuters ESI Highly Cited Papers/Hot Papers 2017-2020, etc. His research has been featured in various public media such as National Science Foundation News Headlines, Science Daily, CBS, IEEE Spectrum, and Communications of ACM. Prof. Hu is the Chair for IEEE Technical Committee on Cyber-Physical Systems. He is the Editor-In-Chief of IET Cyber-Physical Systems: Theory & Applications. He is the 2020 Editor-in-Chief Search Committee Chair for ACM Transactions on Design Automation for Electronic Systems. He is an Associate Editor for IEEE Transactions on Computer-Aided Design, IEEE Transactions on Industrial Informatics, IEEE Transactions on Circuits and Systems, ACM Transactions on Design Automation for Electronic Systems, and ACM Transactions on Cyber-Physical Systems. He is also a Guest Editor for eight IEEE/ACM journals such as Proceedings of the IEEE and IEEE Transactions on Computers. He has held chair positions in various IEEE conferences. He is a Fellow of IET and a Fellow of British Computer Society.