

**2022 the 5<sup>th</sup> Asia Conference on  
Cognitive Engineering and Intelligent Interaction  
&  
2022 the International Conference on  
Intelligent Computing and Next Generation Networks**

# **CEI2022 & ICNGN2022 Conference Schedule**

**Hangzhou, China**

**Dec. 16-17, 2022**

**<https://ceii.asia>**

**<https://icngn.org>**

# CEII 2022 ICNGN 2022

2022 the 5<sup>th</sup> Asia Conference on Cognitive Engineering and Intelligent Interaction  
2022 the International Conference on Intelligent Computing and Next Generation Networks

Dec. 16–17, 2022|Hangzhou, China (On Virtual)



## Welcome Messages

Dear Colleagues and Friends,

It is a great pleasure and honor to invite you to 2022 5<sup>th</sup> Asia Conference on Cognitive Engineering and Intelligent Interaction & International Conference on Intelligent Computing and Next Generation Networks which will take place at the online in ZOOM from 16 to 17 December 2022. We are excited about the opportunities of holding an innovative hybrid conference and reaching a wider audience that a conference can include. Participants from around the world are expected to actively participate in this event.

This Conference will be held under a set of themes in artificial intelligence and next generation networks. We are certain that this will be a platform to gather and disseminate the latest knowledge in recent advancements in artificial intelligence and next generation networks fields covered during a conference that will provide a platform for leading scientists, engineers through several sessions.

Many thanks go out to the members of the TPC, the Organising Committee, and the Local Organising Committee for their input and support.

You can expect a very fruitful and enjoyable time during the conference. We look forward to welcoming you to ZOOM for the CEII2022 & ICNGN2022.

Welcome to Leicester and enjoy the Conference!

**General Chair of CEII2022**

**Prof. Ning Sun**

Nankai University, China

**General Chair of ICNGN2022**

**Prof. Gyu Myoung Lee**

Liverpool John Moores University (LJMU), UK

**Committees (Ordered by Last Name)****CEII Committee****Conference Chair**

Prof. Ning Sun, Nankai University, China

**Program Committee Chair**

Prof. Huiyu Zhou, University of Leicester, UK

Prof. Lu Leng, Nanchang Hangkong University, China

**Technical Program Committees**

Prof. Daowen Qiu, Sun Yat-sen University, China

Prof. Xinde Li, Southeast University, China

Prof. Pascal Lorenz, University of Haute Alsace, France

Prof. Panos M. Pardalos, University of Florida, USA

Prof. Luigi Maxmilian Caligiuri, University Of Calabria, Italy

Prof. Md. Roshidul Hasan, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur, Bangladesh

Prof. Riccardo Patriarca, Sapienza Università Di Roma, Italy

Prof. Herwig Unger, University of Hagen, Germany

Prof. Renato De Leone, University of Camerino, Italy

Prof. Jie Zhu, Shanghai Jiao Tong University, China

Prof. Guoqing Wang, University of Electronic Science and Technology, China

Prof. Chi-Hua Chen, Fuzhou University, China

Prof. Xiaolin Jia, Southwest University of Science and Technology, China

Prof. Mohammed CHADLI, University Paris-Saclay, France

Prof. Vijayakumar Varadarajan, The University of New South Wales, Australia

Prof. Maria Gini, University of Minnesota, USA

Prof. Dr. Chien-Sing LEE, Sunway University, Malaysia

Assoc. Prof. Hassen FOURATI, University Grenoble Alpes, France

Assoc. prof. Hamid Reza Karimi, Politecnico di Milano, Italy

Assoc. Prof. Linlin You, Sun Yat-sen University, China

Dr. Min Shi, Harvard University, USA

**ICNGN Committee****Conference Chair**

Prof. Gyu Myoung Lee, Liverpool John Moores University (LJMU), UK

**Program Committee Chairs**

Prof. Pavel Loskot, Zhejiang University, China

Prof. Dimitrios Karras, National and Kapodistrian University of Athens (NKUA), Greece

**Technical Program Committees**

Prof. Ljiljana Trajkovic, Simon Fraser University, Canada

Prof. Hamed Taherdoost, University Canada West, Canada

Prof. Alex Mathew, Bethany College, USA

Prof. Francesco Zirilli, Università di Roma La Sapienza, Italy

Prof. Siarry Patrick, Université Paris-Est Creteil, France

Prof. Daowen Qiu, Sun Yat-sen University, China

Prof. Chuan-Ming Liu, National Taipei University of Technology (NTUT), Taiwan

Prof. Ryszard Tadeusiewicz, AGH University of Science and Technology, Poland

Prof. Haruo Kobayashi, Gunma University, Japan

Prof. Xie Ming, Nanyang Technological University, Singapore

Prof. Fairouz Kamareddine, Heriot-Watt University, UK

Prof. Carlos Becker Westphall, Federal University of Santa Catarina, Brazil

Prof. Antonio Formisano, University of Naples Federico II, Italy

Assoc. Prof. Thomas Y.S. Lee, University of Illinois at Chicago, USA

Assoc. Prof. Dr. Marcin Paprzycki, Polish Academy of Sciences, Poland

Assoc. Prof. Noor Zaman Jhanjhi, Taylor's University, Malaysia

Assoc. Prof. Mamoun Alazab, Charles Darwin University, Australia

Asst. Prof. Rocco Zaccagnino, University of Salerno, Italy

Dr. Koh You Beng, University of Malaya, Malaysia

Dr. Przemyslaw Falkowski-Gilski, Gdansk University of Technology, Poland

## Time Schedule (Beijing Time, UTC/GMT+8)

## December 17, 2022 UTC/GMT+8 (Online in ZOOM)

Speaker's time slot	Standard Time (UTC/GMT+8)	Presentation Information
	9:50-9:55 am	Opening Speech
	9:55-10:00 am	Opening Speech
	10:00-12:00 am	Keynote Session 1
Dec. 16   21:00-21:30 pm UTC/GMT-5	10:00-10:30 am	<b>Artificial Intelligence and Machine Learning for Smart Transportation Infrastructure</b> Prof. Sanjay Ranka   University of Florida, USA
Dec. 17   10:30-11:00 am UTC/GMT+8	10:30-11:00 am	<b>Federated continual learning at edge: Convolutional Neural Networks and beyond</b> Assoc. Prof. Rui Han   Beijing Institute of Technology, China
Dec. 16   20:00-20:30 pm UTC/GMT-7	11:00-11:30 am	<b>Towards the Pinnacle of Cognitive AI (CAI) beyond Pretrained and Preprogramed Technologies</b> Prof. Yingxu Wang   University of Calgary, Canada
Dec. 16   19:30-20:00 pm UTC/GMT-8	11:30-12:00 am	<b>Machine Learning for Detecting Ransomware Attacks</b> Prof. Ljiljana Trajkovic   Simon Fraser University, Canada
	11:30-13:00 am	Break
	13:00-16:00 pm	Keynote Session 2
Dec. 17   13:00-13:30 pm UTC/GMT+8	13:00-13:30 pm	<b>The Cause of Causal Emergence: Redistribution of Uncertainty and Modeling of Intelligence</b> Dr. Yutao Yue   JITRI Institute of Deep Perception Technology, China
Dec. 17   13:30-14:00 pm UTC/GMT+8	13:30-14:00 pm	<b>Voltage-Controlled Magnetic Tunnel Junctions enabled Low-Power Feature Extractor</b> Prof. Yanfeng Jiang   Jiangnan University, China
Dec. 17   07:00-07:30 am UTC/GMT+1	14:00-14:30 pm	<b>On Emerging Patterns in Social Interaction and their Related Adaptive Mental Processes: an Agent-Based Adaptive Network Modeling Perspective</b> Prof. Jan Treur   Vrije Universiteit Amsterdam, Netherlands Dr. Sophie C.F. Hendrikse (co-speaker)   Vrije Universiteit Amsterdam, Netherlands
	14:30-15:00 pm	Break
Dec. 17   07:00-07:30 am UTC/GMT+0	15:00-15:30 pm	<b>Challenges in the Next Generation IoT and Context-Active Resilience in Cyber Physical Systems</b> Prof. Xiaodong Liu   Edinburgh Napier University, UK
Dec. 17   07:30-08:00 am UTC/GMT+0	15:30-16:00 pm	<b>Transforming healthcare with artificial intelligence</b> Prof. Huiyu Zhou   School of Computing and Mathematical Sciences University of Leicester, UK
	16:00-16:30 pm	Break

## December 17, 2022 UTC/GMT+8 (Online in ZOOM)

Speaker's time slot	Standard Time (UTC/GMT+8)	Presentation Information
	<b>16:30-20:30 pm</b>	<b>Invited Speech</b>
Dec. 17   09:30-10:00 am UTC/GMT+1	<b>16:30-17:00 pm</b>	Prof. Francisco Falcone   Public University of Navarre, Spain
Dec. 17   11:00-11:30 am UTC/GMT+2	<b>17:00-17:30 pm</b>	<b>Agent-based Distributed AI framework for 5G/6G</b> Dr. Iacovos Ioannou   CYENS - Centre of Excellence, Cyprus
Dec. 17   09:30-10:00 am UTC/GMT+0	<b>17:30-18:00 pm</b>	<b>Human &amp; Artificial Cognitive Intelligence for Collective Decision Making</b> Dr. Asimina Mertzani   IMPERIAL COLLEGE LONDON, UK
Dec. 17   18:00-18:30 pm UTC/GMT+8	<b>18:00-18:30 pm</b>	Dr. Chao Wang   Suzhou University, China
Dec. 17   11:30-12:00 am UTC/GMT+1	<b>18:30-19:00 pm</b>	Dr. Chan Naseeb   Data Science & AI Senior Technical Leader - IBM Data Science & AI Elite - EMEA, Munich, Germany
Dec. 17   19:00-19:30 pm UTC/GMT+8	<b>19:00-19:30 pm</b>	<b>Research on key technologies of humanoid robot with application</b> Assoc. Prof. Fenghua Wu   Shenyang City University, China
Dec. 17   20:30-21:00 pm UTC/GMT+9	<b>19:30-20:00 pm</b>	<b>D-Agree: A Discussion Tool to Improve Large-Scale Online Discussion</b> Assistant Professor Jawad Hagbeen   Graduate School of Informatics, Kyoto University
Dec. 17   13:00-13:30 pm UTC/GMT+1	<b>20:00-20:30 pm</b>	Assoc. Prof. MARCIN PAPRZYCKI   Systems Research Institute, Polish Academy of Sciences

## Keynote Speakers (in chronological order)



### **Prof. Sanjay Ranka**

University of Florida, USA

Sanjay Ranka is a Distinguished Professor in the Department of Computer Information Science and Engineering at University of Florida. His current research is on developing algorithms and software using Machine Learning, Internet of Things, GPU Computing and Cloud Computing for solving applications in Transportation and Health Care. He is a fellow of the IEEE, AAAS, and AIAA (Asia-Pacific Artificial Intelligence Association) and a past member of IFIP Committee on System Modeling and Optimization. He was awarded the 2020 Research Impact Award from IEEE Technical Committee on Cloud Computing. He was also awarded the 2022 Distinguished Alumnus Award from Indian Institute of Technology, Kanpur. His research is currently funded by NIH, NSF, USDOT, DOE and FDOT.

From 1999-2002, as the Chief Technology Officer and co-founder of Paramark (Sunnyvale, CA), he conceptualized and developed a machine learning based real-time optimization service called PILOT for optimizing marketing and advertising campaigns. Paramark was recognized by VentureWire/Technologic Partners as a Top 100 Internet technology company in 2001 and 2002 and was acquired in 2002.

**Title:** Artificial Intelligence and Machine Learning for Smart Transportation Infrastructure



### **Assoc. Prof. Rui Han**

Beijing Institute of Technology, China

Dr. Rui Han is an associate professor and PhD supervisor at the School of Computer Science & Technology, Beijing Institute of Technology (BIT). Before joining BIT in 2014, He received MSc with honor in 2010 from Tsinghua University, China, and obtained his PhD degree in 2014 from the Department of Computing, Imperial College London, UK. His research interests are cloud and edge computing, big data systems, and system optimization for highly parallel workloads (in particular big data analytics and deep learning applications). He has over 50 publications in these areas, including papers at ACM MobiCom, TC, TPDS, TKDE, TDSC, INFOCOM, ICDCS, ICPP, CCGrid, and CLOUD.

Dr. Rui Han also acts as the technical advisor in a list of companies, including ThunderSoft (Edge computing), SudoPrivacy (Data privacy), and Transwarp (Big data systems), and closely collaborates with companies such as Tcent, Midea, and CASICloud

**Title:** Federated continual learning at edge: Convolutional Neural Networks and beyond

## Keynote Speakers (in chronological order)



### **Prof. Yingxu Wang**

University of Calgary, Canada

Dr. Yingxu Wang is professor of cognitive informatics, brain science, software science, and denotational mathematics. He is the founding President of International Institute of Cognitive Informatics and Cognitive Computing (ICIC). He is a Fellow of ICIC, a Fellow of WIF (UK), a P.Eng. of Canada, and a Senior Member of IEEE and ACM. He has been visiting professor (on sabbatical leaves) at Oxford University (1995), Stanford University (2008 | 2016), UC Berkeley (2008), and MIT (2012), respectively. He has been a full professor since 1994. He is the founder and steering committee chair of the annual IEEE International Conference on Cognitive Informatics and Cognitive Computing (ICCI\*CC) since 2002. He is founding Editor-in-Chiefs of International Journal of Cognitive Informatics & Natural Intelligence; International Journal of Software Science & Computational Intelligence; Journal of Advanced Mathematics & Applications; and Journal of Mathematical & Computational Methods, as well as Associate Editor of IEEE Trans. on SMC - Systems. He has served as chair or co-chair of 19 IEEE or other int'l conferences and a member of IEEE Selection Committee for Senior Members in 2011.

Dr. Wang's publications have been cited for 30,000+ times according to Google Scholar. According to Research Gate statistics, his research profile has reached top 2.5 per cent worldwide, top one to 10 (timely vary in the range) at the University of Calgary, and the most read work in neural networks. He is the recipient of dozens international awards on academic leadership, outstanding contributions, best papers, and teaching in the last three decades.

**Title:** Towards the Pinnacle of Cognitive AI (CAI) beyond Pretrained and Preprogramed Technologies



### **Prof. Ljiljana Trajkovic**

Simon Fraser University, Canada

Ljiljana Trajkovic received the Dipl. Ing. degree from University of Pristina, Yugoslavia, the M.Sc. degrees in electrical engineering and computer engineering from Syracuse University, Syracuse, NY, and the Ph.D. degree in electrical engineering from University of California at Los Angeles. She is currently a professor in the School of Engineering Science, Simon Fraser University, Burnaby, British Columbia, Canada. Her research interests include communication networks and dynamical systems. She served as IEEE Division X Delegate/Director and President of the IEEE Systems, Man, and Cybernetics Society and the IEEE Circuits and Systems Society. Dr. Trajkovic serves as Editor-in-Chief of the IEEE Transactions on Human-Machine Systems and Associate Editor-in-Chief of the IEEE Open Journal of Systems Engineering. She is a Distinguished Lecturer of the IEEE Circuits and System Society and the IEEE Systems, Man, and Cybernetics Society. Dr. Trajkovic is a Professional Member of IEEE-HKN and a Life Fellow of the IEEE.

**Title:** Machine Learning for Detecting Ransomware Attacks

## Keynote Speakers (in chronological order)



**Dr. Yutao Yue**

JITRI Institute of Deep Perception Technology, China

Dr. Yutao Yue received his Bachelor's degree of applied physics from University of Science and Technology of China, master and PhD degrees of computational physics from Purdue University of USA. He then served as team leader of Guangdong "Zhujiang Plan" 3rd Introduced Innovation Scientific Research Team, senior scientist and Chief Human Resources Officer of Shenzhen Kuang-Chi Group, etc. His research interest include computational modeling and artificial intelligence, radar vision fusion, electromagnetic fields, etc. He has been engaged in frontier technology research and development and industrialization for 20 years.

**Title: The Cause of Causal Emergence: Redistribution of Uncertainty and Modeling of Intelligence**



**Prof. Yanfeng Jiang**

Jiangnan University, China

Professor Yanfeng Jiang received his undergraduate degree in 1993 from the Department of Electronic Engineering, Southeast University, and Ph.D. degree of Microelectronics and Solid-electronics from Lanzhou University in 2000, a postdoctoral fellow in the Key Laboratory of MEMS, Ministry of Education, Southeast University from 2000 to 2002. An Associate Professor and a Professor at North China University of Technology from 2002 to 2010, and a Research Fellow a Department of Electrical and Computer Engineering at the University of Minnesota System from 2010 to 2016. Now, he is a Professor at School of Internet of Things Engineering, Jiangnan University.

Prof. Jiang Chaired more than 10 national and provincial scientific research projects, including the general program of National Natural Science Foundation of China, Beijing Science and Technology Program, etc., won more than 10 provincial and ministerial level scientific and technological achievements awards, published more than 200 papers, other-citation more than 2000 times.

**Titled:** Voltage-Controlled Magnetic Tunnel Junctions enabled Low-Power Feature Extractor



## Keynote Speakers (in chronological order)



### **Prof. Jan Treur**

Vrije Universiteit Amsterdam, Netherlands

Jan Treur has been a full professor of AI since 1990 and is a well-recognized expert in the area of multidisciplinary human-like AI modeling. He has published over 700 well-cited papers about cognitive, affective, and social modeling and AI systems making use of such models. He has also supervised more than 40 Ph.D. students in these areas and from 2016 written and edited three books on (adaptive) network-oriented AI modeling and its application in various other disciplines. Current research addresses the modeling of higher-order adaptive processes by a self-modeling network modeling approach introduced in his Springer Nature 2020 book. A specific recent focus is on mental processes based on internal mental models and their use by internal simulation, their learning, and the control over them, which was described in his 2022 book edited together with Laila van Ments. A related focus is on the development and use of shared mental models supporting safety in organizations such as hospitals. For this focus, a new Springer Nature book about computational modeling of multilevel organizational learning edited by him, Gülay Canbaloglu, and Anna Wiewiora is in preparation and will come out beginning of 2023. Another recent focus is on modeling how in social interactions interpersonal synchrony emerges and how this leads to adaptive interaction behaviour.

For more details, see <https://www.researchgate.net/profile/Jan-Treur/research>

**Title:** On Emerging Patterns in Social Interaction and their Related Adaptive Mental Processes: an Agent-Based Adaptive Network Modeling Perspective



### **Dr. Sophie C.F. Hendrikse (co-speaker with Prof. Jan Treur)**

Vrije Universiteit Amsterdam, Netherlands

Sophie Hendrikse holds a position as researcher at the Clinical Psychology department at Vrije Universiteit Amsterdam and as a guest researcher at the Methodology and Statistics unit within the Psychology institute at Leiden University. She was educated through a research master in Social and Behavioral Sciences and a master in Computer Science with a specialization in Artificial Intelligence and Data Science. Her research focuses on multimodal social interaction of humans and/or artificial agents. She has developed multi-adaptive agent models to capture intrapersonal synchrony, interpersonal synchrony and adaptive social behaviors based on human-human interactions research. These agent models can be used both in agent-agent interactions and human-agent interactions. In a Springer Nature book that will come out in 2023 this will be discussed in detail. She has also been involved in the development of a brain-computer interface and studies algorithms to analyze interpersonal synchrony.

For more details, see <https://www.researchgate.net/profile/Sophie-Hendrikse/research>

## Keynote Speakers (in chronological order)



### **Prof. Xiaodong Liu**

Edinburgh Napier University, UK

Prof Xiaodong Liu has been very active in the research in AI-driven software engineering, focusing on pervasive systems (Internet of Things), service-oriented architecture, evolution of cloud services, and intelligence-driven smart systems. He has won 12 external grants and successfully led or leading these externally funded projects with the role of principal investigator. Currently Prof Liu leads the Intelligence-Driven Software Engineering Research Group. He is the founder a spin out company, FlexiCAGE Ltd. He has published 160 papers in refereed international journals and conferences and 5 book chapters. He is the inventor of 1 patent in Generative Component Adaptation registered in UK, USA and at International Level (PCT). He has been the chair, co-chair or PC member of a number of IEEE and IASTED International Conferences. He is the associate editor of 2 international journals and the editorial board member of 3 international journals. He is the chief editor of 3 IGI Global Research Handbooks. He is the regular reviewer of other 6 international journals. He is a senior member of IEEE Computer Society, and a member of British Computer Society.

**Title:** Challenges in the Next Generation IoT and Context-Active Resilience in Cyber Physical Systems



### **Prof. Huiyu Zhou**

School of Computing and Mathematical Sciences

University of Leicester, UK

Dr. Huiyu Zhou received a Bachelor of Engineering degree in Radio Technology from Huazhong University of Science and Technology of China, and a Master of Science degree in Biomedical Engineering from University of Dundee of United Kingdom, respectively. He was awarded a Doctor of Philosophy degree in Computer Vision from Heriot-Watt University, Edinburgh, United Kingdom. Dr. Zhou currently is a full Professor at School of Computing and Mathematical Sciences, University of Leicester, United Kingdom. He has published over 400 peer-reviewed papers in the field. He was the recipient of "CVIU 2012 Most Cited Paper Award", "MIUA 2020 Best Paper Award", "ICPRAM 2016 Best Paper Award" and was nominated for "ICPRAM 2017 Best Student Paper Award" and "MBEC 2006 Nightingale Prize". His research work has been or is being supported by UK EPSRC, ESRC, AHRC, MRC, EU, Royal Society, Leverhulme Trust, Invest NI, Puffin Trust, Alzheimer's Research UK, Invest NI and industry.

Homepage: <https://le.ac.uk/people/huiyu-zhou>

**Title:** Transforming healthcare with artificial intelligence

## Invited Speakers (in chronological order)



### **Prof. Francisco Falcone**

Public University of Navarra (UPNA), Spain

Institute of Smart Cities (ISC), Spain

Tecnologico de Monterrey, Mexico

FRANCISCO FALCONE (Senior Member IEEE) received the degree in telecommunication engineering and the Ph.D. degree in communication engineering from the Universidad Pública de Navarra (UPNA), Spain, in 1999 and 2005, respectively. From 1999 to 2000, he was Microwave Network Engineer, Siemens-Italtel, Málaga. From 2000 to 2008, he was Mobile Access Network Engineer, Telefónica Móviles, in Pamplona. In 2009 he co-founded Tafco Metawireless, spin-off of the UPNA (with EIBT national label), of which he was its first manager. In parallel, from 2003 to 2009 he was Assistant Lecturer in the Department of Electrical and Electronic Engineering, UPNA. In June 2009 he became Associate Professor and since September 2022, Full Professor at the EEC Dept at UPNA. From 2011 to 2012 he was secretary of the Department of Electrical, Electronic and Communication Engineering of UPNA. From January 2012 to July 2018 and from July 2019 to November 2021 he was Head of the Department of Electrical, Electronic and Communication Engineering of the UPNA. In 2018 he was Visiting Professor at Kuwait College of Science and Technology, Kuwait, for three months. He is also affiliated with the Smart Cities Institute of the Public University of Navarra, a multidisciplinary research institute with over 100 researchers, being Head of the Institute since May 2021, working on contextual and interactive environments solutions, through the integration of heterogeneous wireless communications networks, based on HetNet and IoT. Since June 2022, he is Distinguished Visiting Professor in Telecommunications School of Engineering and Science, Tecnologico de Monterrey, Mexico. His research interests are related to computational electromagnetics applied to the analysis of complex electromagnetic scenarios, with a focus on the analysis, design, and implementation of heterogeneous wireless networks to enable context-aware environments. He has over 600 contributions in indexed international journals, book chapters, and conference contributions. He has been awarded several research awards: CST Best Paper Award 2003 and 2005, Prize of the Official Association of Telecommunications Engineers 2005 for the Best Doctoral Thesis, UPNA PhD Award 2004-2006 in Experimental Sciences, 1st Prize Juan López de Peñalver 2010 to the best young researcher, Real Academia de Ingeniería de España, XII Talgo Foundation Award for Technological Innovation with the proposal "Implementation of an Environment for the Railway Ecosystem", ECSA-2 Best Paper Award (2015), Best Paper Award IISA (2015), ECSA Award -3 Best Paper Award (2016), ECSA-4 Best Paper Award (2018), Best Paper Award ISSI (2019) and IIoT 2020 Best Paper Award.

## Invited Speakers (in chronological order)



### **Dr. Iacovos Ioannou**

CYENS - Centre of Excellence, Cyprus

Dr. Iacovos Ioannou has twenty years of practical expertise in the IT industry, including analysis, development, installation, and maintenance of IT systems, embrace me with the know-how and the technical skills needed to teach security and network (mobile and wireless) courses at any level. He is an extremely motivated computer scientist. His undergraduate, postgraduate (MSc) and doctoral degrees in computer science have equipped him with a thorough understanding of systems and provided him with the knowledge tools to research them and improve them. More specifically, BSc and MSc degrees in computer science and security have equipped him to know the correct requirements and enforce the right policies in order to meet the security and privacy needs of modern IT systems (University of Cyprus, Computer Science Department, Open University, Information Security). In addition, his PhD armed him with the research abilities and a broad understanding of telecommunication networks, machine learning, and artificial intelligence required for academic work. Currently, his focus is on research, and he works as a researcher at CYENS and the University of Cyprus's Networks Research Laboratory. His research interests include security at mobile and IoT networks, mobile and wireless communications on fifth-generation (5G) and sixth-generation (6G) networks, as well as device-to-device (D2D) communications utilising artificial intelligence and machine learning.

**Title:** Agent-based Distributed AI framework for 5G/6G

## Invited Speakers (in chronological order)



**Dr. Asimina Mertzani**

IMPERIAL COLLEGE LONDON, UK

Asimina Mertzani is a PhD student in the Electrical and Electronic Engineering (EEE) Department of the Imperial College of London. She is a member of the Intelligent Systems and Networks Research Group, and her research interests include distributed information systems, self-organisation, machine learning, knowledge management, supply chain optimisation and sustainability. She has published articles in scientific journals, conference and workshop proceedings in these topics, and currently her main research focus is the application of reinforcement learning techniques for collective decision making.

Apart from her research accomplishments, Mrs. Mertzani has been working as an Implementation Consultant, focusing on quantitative techniques and software technology for data-driven decision-making, with ORTEC, a leading applied mathematics firm, and as a Machine Learning Specialist, focusing on the development of innovative solutions based on machine learning techniques and the intelligent transformation with Mantis – Ecovium, a company specialised in Warehouse Management and Optimisation.

**Title: Human & Artificial Cognitive Intelligence for Collective Decision Making**



**Dr. Chao Wang**

Suzhou University, China

Chao Wang is currently a Lecture at the School of Information Engineering of Suzhou University, China. Meanwhile, he is now a Ph.D. candidate with the Institute of Machine Learning and Systems Biology, School of Electronics and Information Engineering, Tongji University, China. He successively served as a Research Associate at Nanyang Technological University, Singapore, Jacobs University Bremen, Germany, and Shenzhen Institute of advanced technology, Chinese Academy of Sciences, China from Nov. 2009 to Aug. 2012. From Sept. 2012 to Mar. 2013, he worked as an Engineer in Huawei Technology Co., Ltd. He received a B.S. degree from Anhui University, China, in 2006, and an M.S. degree from the University of Science and Technology of China, in 2009. His research interests are in the area of pattern recognition, deep learning and image processing. He has published over 20 papers in peer-reviewed international journals and conferences in these research areas.

## **Invited Speakers (in chronological order)**



### **Dr. Chan Naseeb**

IBM Data & AI

Data Science & AI Senior Technical Leader - IBM Data Science & AI Elite- EMEA

Munich, Germany

Chan Naseeb is currently a Data Science and AI Technical Leader with IBM Data Science and AI Elite-EMEA. He is also a Technical Leader in artificial intelligence, data science, quantum computing, blockchain, and the IoT to help organizations to digitally transform and become data driven. He is an Exponential Thought Leader and a Life-Long Learner with a proven track record of transforming businesses via data science, information technology, automation and modern technologies. The consistent theme throughout his career of championing exponential change by combining existing technologies, data science and AI to create industrial scale processes, including innovative automation, IT systems and analysis pipelines to support these. He is an experienced leader of science, analytics and technical teams with an advanced understanding of tectonic technologies and the appropriate application of these technologies to solve problems at a massive scale. The desire for continuous learning, growth, and development to keep his approaches, skills, and leadership relevant. His strong leadership skills leading large, diverse, and geographically dispersed teams.

### **Assoc. Prof. Fenghua Wu**

Shenyang City University, China

Dr. Fenghua Wu is the deputy dean of the School of Intelligence and Engineering of Shenyang City University, and the dean of the Key Laboratory of Humanoid Football Training Robot of Liaoning Province. She received Ph.D. degree in Control Theory and Control Engineering from Northeastern University in China and fulfilled her postdoctoral research from Shenyang Institute of Automation, Chinese Academy of Sciences. She is the Member of Robotics Competition Working Committee of China Association of Automation, the Member of Liaoning Automation Teaching Guidance Committee, the leader of Liaoning Provincial Staff Innovation Studio and the Master's supervisor of Shenyang Jianzhu University. Her research interests including intelligent behavior and optimal motion control of humanoid robot with application, development of intelligent system for full information motion of digital Avatar, etc.

**Title:** Research on key technologies of humanoid robot with application

## **Keynote & Invited Speakers (in chronological order)**



### **Jawad HAQBEEN**

Graduate School of Informatics, Kyoto University

Jawad Haqbeen is an Assistant Professor in the Department of Social Informatics at Kyoto University. His research is about social informatics and its applications like facilitating opinion and consensus-building using Artificial intelligence. He uses conversational AI to study collective discussion, intelligence, and decision-making in online communities. Jawad is a recipient of the Best Presentation Award in KICSS-21, the IBM Research Excellence Award in PAAMS-20, the Best Paper Award in KICSS-20, and the IEEE Nagoya Branch Best Research Presentation Award in 2018, the Japanese Government MEXT Scholarship in 2015, and Japanese Government JICA Scholarship in 2011. Jawad served as a program committee member in leading AI conferences such as AAAI-23, PRIMA-22, and ACAN-22 and reviewer for AI journals such as Applied Artificial Intelligence and Group Decision and Negotiation. In addition, Jawad has been the local arrangement and tutorial chair for international conferences such as IEEE ICA-23, PRIMA-22, KICSS-22, PRICAI-21, and KICSS-20. He holds a Ph.D. and MSc. in Computer Science from Nagoya Institute of Technology, and Waseda University, Japan.

**Title:** D-Agree: A Discussion Tool to Improve Large-Scale Online Discussion



### **Assoc. Prof. MARCIN PAPRZYCKI**

Systems Research Institute, Polish Academy of Sciences

Marcin Paprzycki has received his M. S. Degree in 1986 from Adam Mickiewicz University in Poznan, Poland, his Ph. D. in 1990 from Southern Methodist University in Dallas, Texas and his Doctor of Science Degree from Bulgarian Academy of Sciences in 2008. Presently he is serving as an Associate Professor, Systems Research Institute, Polish Academy of Sciences, Poland. His initial research interests were in high performance computing and parallel computing, high performance linear algebra in particular. Over time they evolved toward distributed systems and Internet-based computing; in particular, agent systems. He has published more than 500 research papers and was invited to Program Committees of almost 900 international conferences. He is on the editorial boards of 14 journals. He is senior member of the ACM and IEEE, Senior Fulbright Lecturer, IEEE CS Distinguished Visitor. More information can be found at: <https://www.ibspan.waw.pl/~paprzyck/>

**Thanks again for your great support to CEII2022&ICNGN2022 !**