

2023 International Conference on Power, Communication, Computing and Networking Technologies (PCCNT 2023)

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1. About Conference

1.1 Brife Introduction

This conference constitutes 2023 International Conference on Power, Communication Computing and Networking Technologies (PCCNT 2023 On the one hand: PCCNT 2023 serves as an open forum for sharing and spreading the newest ideas and latest research findings among all parties involved in any aspects of power, communication, computing and networking technologies. On the other hand,

This conference will be an ideal platform for bringing together researchers, practitioners, scholars, professors and engineers from all around the world to exchange the newest research results and stimulate the scientific innovations. It will feature a high-quality technical & experiential program dealing with a mix of traditional and contemporary hot topics in paper presentations and high-profile keynotes.

Significantly, this conference is organized by Hubei Zhongke Academy of Natural Sciences Co, Ltd., hoping to foster the knowledge and understanding of the recent advances across the broad field of power, communication, computing and networking technologies. The conference organizing committee is excited to invite you to attend the event, for meeting and exchanging the recent advances and research achievements in the common research fields

1.2 Call for Papers

1.2.1 PCCNT 2023

PCCNT 2023 solicits research papers describing significant and innovative contributions to the field of Electrical, Computer & Electronics Engineering and Technologies. The topics of interest include but are not limited to:

- Track 1: Power System and Optimization Techniques
- Track 2: Renewable and Green Energy Technologies
- Track 3: Power Electronics and Electrical Transportation Systems
- Track 4: WSNs
- Track 5: Signals and Image Processing
- Track 6: AI Techniques
- Track 7: Data Mining and Data Analytics
- Track 8: Cloud Computing and Cyber Security
- Track 9: IoT on Smart Grid
- Track 10: 5G Technologies

1.3 Publication

1.3.1 PCCNT 2023



Publication in Conference Proceedings



ACM International Conference Proceedings Series

Publisher: ACM

ISBN: 978-1-4503-9995-1

Indexing: Engineering Index (Compendex),

Scopus

2. About Host Unit

The conference is organized by Hubei Zhongke Academy of Natural Sciences Co, Ltd (hereinafter referred to as "the center"). This center, which focuses on scientific and technological services in the field of scientific research services, is initiated by a number of experts and scholars from Wuhan University, Huazhong University of Science and Technology and Wuhan University of Technology in September 2014. As it is established in Wuhan, it dedicates to act as a "bridge for academic exchanges" with diverse technologies, such as Internet, big data and Artificial Intelligence, to provide services for holding academic conference. In this sense, this center aims to endow new driving force for the development of scientific research and solve the difficulty under acdemic exchanges. Now this center has successfully held nearly 100 large and medium-sized international academic conferences, and has reached friendly cooperation with many universities, research institutions and government departments.

3. About Keynote Speakers



Dr. Jinsong Wu, IEEE Senior Member, Universidad de Chile, Chile

Dr. Jinsong Wu is the proposer (2021), Founder (2022) and Founding Editor-in-Chief (2022-present) for the international journal, Green Technologies and Sustainability (GTS), co-published by Elsevier and China Science Publishing & Media Ltd., jointly called KeAi, which is the very first international journal dedicated to general green technologies. He received 2020 IEEE Green Communications and Computing Technical Committee Distinguished Technical Achievement Recognition Award, and received 2017 IEEE Green Communications and Computing Technical Committee Excellent Services Award. He was the leading Editor and a co-author of the comprehensive book published by CRC Press in September 2012. He was elected Vice Chair, Technical Activities, IEEE Environmental Engineering Initiative (EEI) (2017-2022), a pan-IEEE effort under IEEE Technical Activities Board (TAB) across 25 IEEE Societies, Councils, and organization units (OU). He was the founder (2011) and founding Chair (2011-2017) of the Technical Committee on Green Communications and Computing (TCGCC). He is the current Chair (2022-present) and was the co-founder (2014) and founding Vice-Chair (2014-2022) of IEEE Technical Committee on Big Data (TCBD), which was the very first technical organization on big data within the whole IEEE. He was the very first proposer of IEEE Journals/Transactions on green information and communications technologies (ICT) (2011-2012). He was the proposer (2012) and founder (2014) and Series Editor (2014-2018) on Green Communication and Computing Networks of the IEEE Communications Magazine. He was an Area Editor (2016-2020) of IEEE Transactions on Green Communications and Networking. He was Series Editor (2014-2016) of the IEEE Journal of Selected Areas on Communications (JSAC) Series on Green Communications and Networking. He was proposer, chair and speaker of the Technical Panels on Green Communications and Computing in the IEEE INFOCOM 2012, IEEE ICC 2012, and IEEE GLOBECOM 2012. He was one of key proposers (2012-2015) from Green Track into Green Symposium within IEEE Communications Society flagship conferences (2012). He was the leading General Chair in the 2013 IEEE International Conference on Green Computing and Communications (Greencom). In 2014, he proposed Big Data Track with very general topics coverage in IEEE Communications Society flagship conferences, starting at Globecom 2016, which have been 14 successful editions (2016-present). He was the proposer and leading organizer of IEEE International Workshop on Green Standardizations and Industry Issues for ICT and Relevant Technologies (GSICT) in IEEE GLOBECOM 2015, which was the very first dedicated conference effort on green standardizations within IEEE and ACM.



Dr. Bo Hu, IEEE Member, Chongqing University, Chongqing, China

Dr. Bo Hu was born in 1983 in Henan, P.R. China. He received his Ph.D. degree at Chongqing University, China, in 2010. Currently, he is a full professor in the School of Electrical Engineering, at Chongqing University. His main research interests focus on the power system reliability, planning and analysis. He is the author and co-author of over 80 academic papers and two books. He is the team leader of more than 40 projects, including four under the National Natural Science Foundation of China. He is the Editor of the IEEE Transactions on Power Systems and IEEE Power Engineering Letters. He has won the first prize of Science and Technology Advancement Award of China Electric Power Industry, the first prize of Science and Technology Advancement Award of Chongqing City, and the first prize of the Natural Science Award of the Ministry of Education. He served as a member of the Reliability Committee and the Energy Internet Committee of the Chinese Society of Electrical Engineering, and a member of the Standardization Technical Committee of Chinese Electric Power Industry.



Dr. Raffaele Carli, IEEE Senior Member, Polytechnic University of Bari, Italy

Dr. Raffaele Carli received the Laurea degree (Hons.) ir electronic engineering and the Ph.D. degree in electrical and information engineering from the Polytechnic of Bari, Italy, in 2002 and 2016, respectively. From 2003 to 2004, he was a Reserve Officer with Italian Navy. From 2004 to 2012, he worked as a System and Control Engineer and the Technical Manager for a space and defense multinational company. He is currently a Senior Assistant Professor of Automatic Control at the Polytechnic of Bari. He is qualified for access to a position of associate professor in the ERC field: PE7_1 Control engineering since 2021. He is the technical responsible for the Decision and Control Laboratory (coordinated by prof. Mariagrazia Dotoli) at the Department of Electric and Information Engineering (DEI) of the Polytechnic of Bari (http://dclab.poliba.it/). He is an author of over 60 printed international publications. His area of expertise is the development of decision and control techniques for the modelling, optimization, management, and control of complex and large-scale systems. His research interests include the formalization, simulation, and implementation of decentralized, distributed, and hierarchical cptimization and control algorithms, to be applied on distributed systems (cooperative and noncooperative), multi-agent systems, and networked systems in smart frameworks such as for example the industry and energy fields. He was the Young Career Chair of the 2017 IEEE Conference on Automation Science and Engineering and the Pubblication Co-chair of the 2020 IEEE Conference or Automation Science and Engineering. He is a member of the conference editorial board for the IEEE Robotics and Automation Society (RAS) and IEEE Systems, Man, and Cybernetics Society (SMC), a member of the international program committee of over 20 international conferences, and a guest editor for special issues on interrational journals. For additional information, visit: http://dclab.poliba.it/people/raffaele-carli/



Dr. Morteza Okhovvat, Golestan University of Medical Sciences, Iran

Dr. Morteza Okhovvat is currently an Assistant Professor at school of paramedicine, Golestan University of Medical Sciences, Iran. He has held visiting position at the department of computer science, University of Michigan, Ann Arbor, USA. He is a member of the Iranian Elite Foundation and also received several national and institutional awards, including the distinguished Student of Iran (2007, 2016), the top young person of Iran in part of Science and research (2013), the distinguished lecturer of Golestan University (2012), the top young person of Golestan province of Iran in part of Science and research (2012), the first ranked B.S. Student, the first ranked M.Sc. Researcher, the first ranked Ph.D. student and distinguished student in Iran University of Science and Technology in four consequent Years from 2014 to 2017. He ran numerous national projects and his main research interests include Health Information Technology, intelligent medical systems, IoT, modeling and performance evaluation, QoS-set sitive computing and networks as well as on cyberphysical systems and wireless sensor (actor) networks.

4. About Conference Programme

	September 24, 2023, Beijing Time Wuhan, Hubei, Online	
Tencent Meeting(Chinese Version) /VooV Meeting (International Verion) Number:		
	383-732-037 (In the morning)	
	136-608-230 (In the afternoon)	
09:10-09:20	Welcome Speech	
09:20-09:50	Keynote Speech: Environmental Sustainability and Intelligence as well as General Green Technologies Assoc. Prof. Jinsong Wu, Universidad de Chile, Chile (IEEE Senior Member)	
09:50-10:20	Keynote Speech: Joint Optimization of Communication and Control for Virtual Power Plants Prof. Bo Hu, Chongqing University, China (IEEE Member)	
10:20-10:35	Oral Speech: Improved SVPWM Simplified Algorithm Based on NPC Three Level Three Phase Inverter Shiliang Feng, College of Marine Electrical Engineering, Dalian Maritime University	
10:35-10:50	Oral Speech: Hospital Website Penetration Analysis and Vulnerability Reproduction Method Yujing Yu, Center for Information Technology and Statistics The First Affiliated Hospital, Sun Yat-sen University	
10:50-11:05	Oral Speech: Incorporating Smart Transportation with Connected and Automated Vehicle Technologies Shudong Jiang, Department of Transportation, Southwest Jiaotong University Hope College, Chengdu, China	
	Lunch Break	
14:30-15:00	Keynote Speech: Distributed Game-theoretical Control for EV-integrated Energy Communities Assis. Prof. Raffaele Carli, Polytechnic University of Bari, Italy (IEEE Senior Member)	
15:00-15:30	Keynote Speech: Reliable, Time-Sensitive and Energy-Efficient Task Allocation in WSANs Assi Prof. Morteza Okhovvat Golestan University of Medical Sciences. Iran	
15:30-15:45	Oral Speech: Reinforcement learning explains Android malware behavior based on graph neural network School of Computer Science and Technology, Guizhou University	
	Haodong Wei, School of Computer Scier ce and Technology, Guizhou University	
15:45-16:00	Oral Speech: A Rapid Earthquake Disaster Assessment Platform Based on Cloud Computing Ailin Chen, Sichuan Earthquake Agency, Chengdu, China	

5. About Committee

5.1 PCCNT 2023

General Chair

Prof. Udaya Madawala, The University of Auckland, New Zealand (IEEE Fellow)

Co-Chairs

Prof. Z.Y. Dong, the University of New South Wales, Australia (IEEE Fellow)

Assoc. Prof. Jinsong Wu, Universidad de Chile, Chile (IEEE Senior Member)

Technical Program Chairs

Assoc. Prof. Sohrab Mirsaeidi, School of Electrical Engineering, Beijing Jiaotong University (BJTU), China (IEEE Senior Member)

Assoc. Prof. Guolin Sun, University of Electronic Science and Technology of China (UESTC), China (IEEE Member)

Publication Chair:

Prof. Fuyuan Xiao, Chongqing University, China (IEEE Senior Member)

Technical Committee Members:

Prof. Mihaela Popescu, University of Craiova. Ron ania (IEEE Senior Member)

Prof. Omar Hanafy Abdalla, Helwan University, Egypt (ESE Fellow, IEEE Life Senior Member)

Prof. Bo Hu, Chongging University. China (IEEE Member)

Prof. P. Usha Rani, R.M.D Engineering College, India (IEEE Senior Member, ISTE Life Member)

Prof. Zoran Bojkovic, University of Belgrade, Serbia (IEEE Life Senior Member)

Prof. Maheswar Rajagopal, KPR Institute of Engineering and Technology, India

Prof. Jatinderkumar R. Sanini, Symbiosis International Deemed University, India

Assoc. Prof. Ahmad Arabkoohsar, Tecl nical University of Denmark, Denmark

Assoc. Prof. Maciej Dzikuć, University of Zielona Gora, Poland

Assoc. Prof. Tareq Ali Alhmiedat, University of Tabuk, Saudi Arabia

Assoc. Prof. Jianhui Wong, Universiti Tunku Abdul Rahman, Malaysia

Assoc. Prof. Salah-ddine Krit, Ibn Zohr University. Morocco (IEEE Senior Men ber)

Assoc. Prof. Abdelhak Aqqal, Chouaib Doukkali University, Morocco

Assis. Prof. Jalil Piran, Sejong University, South Korea (IEEE Senior Member)

Assis. Prof. Anand Nayyar, Duy Tan University, Viet Nam

Assis. Prof. Raffaele Carli, Polytechnic University of Bari, Italy (IEEE Senior Member)

Assis. Prof. Musa Yilmaz, Batman University, Turkey (IEEE Senior Member)

Assis. Prof. Zeeshan Ahmad Arfeen, The Islamia University of Ballawalpur, Pakistan (IEEE Senior Member)

Assis. Prof. Tirath Prasad Sahu, National Institute of Technology Raipur, India

Dr. Amin Shabanpour-Haghighi, Shiraz University, Iran

Dr. Ranjit Singh Sarban Singh, Universiti Teknikal Malaysia Melaka (UTeM), Malaysia

Dr. Biplob Ray, Central Queensland University, Australia

6. Conference Participlation Method

> Conference Platform:

Tencent Meeting (Chinese Verion)/ VooV Meeting (International Verion)

Platform Number and Link:

In the Morning:

Link: https://meeting.tencent.com/dm/QpSFvcY1FA5L

Number: 383-732-037

In the Afternnon:

Link: https://meeting.tencent.com/dm/FVDfwLdAQVMl

Number: 136-608-230