

CONFERENCE PROGRAM

ICMIC 2024 Conference Program

2024 2nd International Conference on Mechatronics and Intelligent

Control

[ICMIC 2024]

2024 第二届机电一体化与智能控制国际会议

http://www.icmicconf.com/

September 21, 2024

2024年9月21日

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1. Conference Invitation

Distinguished colleagues and friends from all around the world,

As the authors are busy with school opening matters, ICMIC2024, has made a difficult decision to go with online conference. Sincerely thank you for attending the online conference on September 21st, 2024.

ICMIC is technically sponsored by IEEE ComSoc France Chapter, IEEE Computer Society Norway Chapter, ACM Singapore Chapter, IEEE RAS Guangzhou Chapter, IEEE AFILA-IEEE WOMEN IN ENGINEERING TAFILA TECHNICAL UNIVERSITY Chapter; Organized by American Natural Science and Technology. The conference programme consists of world-class keynote addresses, industry-led presentations, as well as extensive networking opportunities, creating an interactive platform for high-level scientific and business discussions.

The conference will be held from 9:00a.m to 11:20a.m on September 21st, 2024, including three sessions: Keynote speeches and oral presentations in the morning, and posters presented on conference website. We are also proud to announce the competition on oral and poster presentations. The best presentations will be awarded with free registration for the next conference.

We'd like to express our deep appreciation for your support in ICMIC2024 again.

Organizing Committee ICMIC 2024 2024.7.18

2. Online Conference Guideline (In Chinese)

Theme: 2024 2nd International Conference on Mechatronics and Intelligent Control

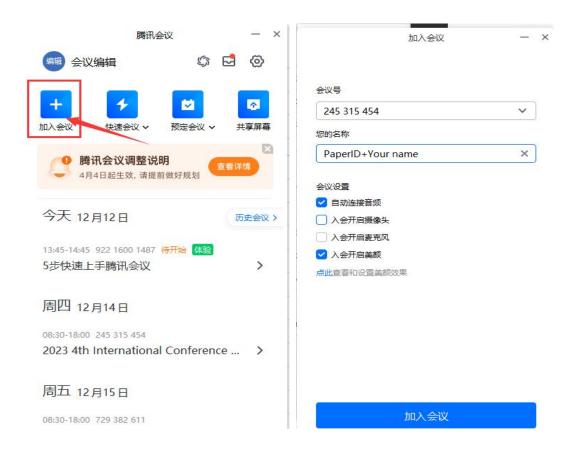
(ICMIC2024)

Time: 2024/09/21 08:30-17:00 (GMT+08:00)

Room ID: 206-803-734

For Chinese attendees, please download "Tencent meeting" APP via: https://meeting.tencent.com/download/

For foreign attendees, please download "VooV meeting" APP via: https://voovmeeting.com/download-center.html?from=1001



Join-Conference at: https://meeting.tencent.com/dm/9Gy4QMEVBz2f

重要信息:

- 一、组委会将在会议当天进行全天候多轮参会签到及核实参会人员情况, 烦请各位老师入会时务必使用文章编号及姓名,以便统计真实参会情况, 会后将根据签到情况提供参会证明。
- 二、请不要在会议期间随意开麦,影响会场学术交流氛围。

3. Keynote Speakers



Prof., Fang Hu, Hubei University of Chinese Medicine, China IEEE / CCF Senior Member

Areas of Expertise: Graph Machine Learning; Mobile Computing; Blockchain; Big Data Analytic

Brief Introduction: Fang Hu received her Ph.D. in 2015 from the School of Computers, Central China Normal University, Wuhan, China. Dr. Hu worked at the University of West Florida as a postdoctoral researcher in the Department of Mathematics and Statistics during 2018-2019. Dr. Hu is currently a Full Professor at the College of Information Engineering, Hubei University of Chinese Medicine. She is an IEEE Senior Member, a China Computer Federation (CCF) Senior Member, the Website Chair of the IEEE Computer Society Big Data STC, the Executive Committee of the China Computer Federation (CCF) on Pervasive Computing, the Communication Committee of the Chinese Institute of Electronics' Youth Professional Technical Committee of the Internet of Things, etc. She is a Guest Editor or Reviewer for over 80 SCI journals, such as IEEE Transactions on Network Science and Engineering, IEEE Systems Journal, etc. She is a Technical Program Committee and Program Committee for over 10 international conferences, such as EIIE, ISHCI, ICMIC, ISAIR, ICBSB, ICPMS, etc. She served as a keynote speaker at ICPHMS 2021, EEIE 2022, ICITBT 2022, MCCE 2023, EEIE 2023, ICMIC 2023, EEIT 2023, etc. As the first or corresponding author, she has published over 40 prestigious conference and journal articles, including over 20 SCI-indexed and over 10 EI-indexed papers.

Speech Title: Graph & Blockchain-based Medical andHealthcare Data Fusion and Applications



Prof., Loc Nguyen, Loc Nguyen's Academic Network, Vietnam

Areas of Expertise: Computer science, statistics, mathematics, and medicine

Brief Introduction: Loc Nguyen is an independent scholar from 2017. He holds Master degree in Computer Science from University of Science, Vietnam in 2005. He holds PhD degree in Computer Science and Education at Ho Chi Minh University of Science in 2009. His PhD dissertation was honored by World Engineering Education Forum (WEEF) and awarded by Standard Scientific Research and Essays as excellent PhD dissertation in 2014. He holds Postdoctoral degree in Computer Science from 2013, certified by Institute for Systems and Technologies of Information, Control and Communication (INSTICC) by 2015. He is volunteer of Statistics Without Borders from 2015. He was granted as Mathematician by London Mathematical Society for Postdoctoral research in Mathematics from 2016. He is awarded as Professor by SciencePG from 2016. He was awarded Doctorate of Statistical Medicine by Ho Chi Minh City Society for Reproductive Medicine (HOSREM) from 2016. He was awarded and glorified as contributive scientist by International Professional Cross-cultural Exchange and Development-Thailand (ICEPD-Thailand) from 2021 and by Eudoxia Research Centre India from 2022. He has published 86 papers and preprints in journals, books and conference proceedings. He is author of 5 scientific books. He is author and creator of 9 scientific and technological products.

Speech Title: Adversarial Variational Autoencoders toextend and improve generative model



Associate Prof., Shiling Zhang, State Grid Chongqing Electric Power Company, China

Areas of Expertise: High voltage and insulation technology; intelligent data mining and digital twin.

Brief Introduction: Shiling Zhang is currently the editorial board member of the Chinese core journal "Insulation Materials" of Peking University and "Electrical Technology". He was awarded by IEEE Power & Energy Society China Technical Council as the "Power System Instrumentation & Measurement Satellite Committee- China" and "Innovative Sensing domestic and foreign and Monitoring Techniques Subcommittee" director. He also serves as the director of the IEEE New Sensing and Monitoring Technology Sub-Committee, and has won the Youth Medal of State Grid Chongqing Electric Power Company, the Outstanding Communist Party Member of State Grid Chongqing Electric Power Company, and the Youth Supporting Science and Technology of State Grid Company 2022 (a total of 50 people nationwide were selected as Chongqing Young Outstanding Talents in 2021).



Prof., Maode Ma, Qatar University, QatarIET Fellow, IEEE Senior Member, ACM Singapore Chapter Chair

Areas of Expertise: Network security and wireless networking.

Brief Introduction: Maode Ma, received his Ph.D. degree from the Department of Computer Science at the Hong Kong University of Science and Technology in 1999. Now, Prof. Ma is a Research Professor in the College of Engineering at Qatar University in Qatar. He has extensive research interests including network security and wireless networking. He has over 500 international academic publications including over 250 journal papers and about 250 conference papers. His publication has received more than 10,000 citations in Google Scholar. Prof. Ma currently serves as the Editor-in-Chief of the International Journal of Computer and Communication Engineering and the Journal of Communications. He also serves as a Senior Editor for IEEE Communications Surveys and Tutorials, and an Associate Editor for the International Journal of Wireless Communications and Mobile Computing and the International Journal of Communication Systems. Prof. Ma is a senior member of the IEEE Communication Society and a member of ACM. He is now the Chair of the ACM, Singapore Chapter. Prof. Ma has been a Distinguished Lecturer for the IEEE Communication Society from 2013 to 2016 and from 2023 to 2024.

Speech Title: Security Issues of Federated Learning

4. Committee

Conference Chairs

Prof., Filippo Sanfilippo, University of Agder (UiA), Norway (IEEE Senior Member, IEEE Robotics and Automation, Control Systems and Intelligent Transportation Systems Joint Chapter Chair)

Prof., Seifedine Kadry, Noroff University College, Norway (IEEE Senior Member, IEEE Computer Society Norway Chapter Chair, ACM Member, IET Fellow, IETE Fellow, IACSIT Fellow

Associate Editor, IEEE Access, Associate Editor, Journal of Ambient Intelligence and Humanized Computing)

Prof., Shunli Wang, Inner Mongolia University of Technology, China (IEEE Member, Academician of the Russian Academy of Natural Sciences, IET Fellow; The World's Top 2% Scientists)

Prof., Yongping Pan, Sun Yat-Sen University, China (IEEE Senior Member, IEEE Robotics and Automation Society Guangzhou Section Chapter Chair; The World's Top 2% Scientists)

Co-Chair

Prof., Zhaohua Liu, Hunan University of Science and Technology, China

Program Chairs

Prof., Yang Yue, Xi'an Jiaotong University, China (SPIE Fellow, IEEE Senior Member; Associate Editor, IEEE Access)

Prof., Huiyu Zhou, University of Leicester, UK (Editor in Chief, Recent Advances in Electrical & Electronic Engineering; Associate Editor, IEEE Access)

Publishing Chairs

Prof., Kun Zhang, Hainan Normal University, China (IEEE Senior Member; ACM / CCF/ CIE Member; Editor in Chief, Distributed Processing System)
Prof., Pascal LORENZ, University of Haute Alsace, France (IEEE Senior

Member, IARIA Fellow, IEEE ComSoc France Chapter Chair)

Associate Professor., Shiling Zhang, State Grid Chongqing Electric Power Company, China (Director of the IEEE New Sensing and Monitoring Technology Sub-Committee)

Technical Program Committee

Prof., Shashikant S. Patil, Atlas SkillTech University, Mumbai, India (IEEE /ACM Senior Member, IEEE ComSoC Bombay Section Chapter Chair)
Prof., Javier Gozalvez, Universidad Miguel Hernandez de Elche (UMH), Spain (Past President of IEEE Vehicular Technology Society)

Dr. T. Velmurugan, University of Madras, India

Prof., S. RAJESH, Mepco Schlenk Engg College, India

Dr. JOSE ANAND, KCG College of Technology, India

Prof., Abdel Ghani AISSAOUI, University of Tahri Mohamed of Bechar, Algeria

Prof., Kamel Barkaoui, Conservatoire National des Arts et Métiers, France

Prof., Gheorghe Grigoras, "Gheorghe Asachi" Technical University of Iasi, Romania

Prof., Jianwei Liu, China University of Petroleum, China

Dr., Zhengming Gao, Jingchu University of Technology, China (IEEE / ACM / CCF Member)

Dr., Lianwu Guan, Harbin Engineering University, China

Prof., Mohamed Gomaa, National Research Centre (NRC), Egypt

Prof., Dan Dobrota, Lucian Blaga University of Sibiu, România

Dr., Barenya Bikash Hazarika, Assam Down Town University, India

Prof., Qibin Li, Chongqing University, China

Dr., Alexey Nekrasov, Southern Federal University, Russia

Prof., Lu Leng, Nanchang Hangkong University, China (IEEE / CCF / ACM / CSIG / CAAI Member)

Prof., Qingsheng Zeng, Nanjing University of Aeronautics and Astronautics, Canada (IEEE Senior Member)

Prof., Seifedine Kadry, Noroff University College, Norway (IET / IETE / IACSIT Fellow)

Prof., Kun Zhang, Hainan Normal University, China (IEEE / ACM / CCF/CIE Member)

Prof., ZhaoHua Liu, Hunan University of Science and Technology, China (IEEE Senior Member)

Prof., Jianhua Wu, Nanchang University, China (IEEE Member)

Prof., Muazzam Ali Khan Khattak, Quaid-i-Azam University, Pakistan

Associate Professor, Shiling Zhang, State Grid Chongqing Electric Power Company, China

Dr. Vinayakumar Ravi, Prince Mohammad Bin Fahd University, Saudi Arabia

Dr. Narendra Londhe, National Institute of Technology Raipur, India (IEEE Senior Member)

Prof., Loc Nguyen, Loc Nguyen's Academic Network, Vietnam

Prof., Xuexi Zhang, Harbin Institute of Technology, China

Prof., Fateh Mebarek-Oudina, University of 20 Août 1955-Skikda, Algeria

Prof., Zezhong Xu, Changzhou Institute of Technology, China

Prof., Farid ABED-MERAIM, Arts et Métiers ParisTech, France

Prof., Wuyi Yue, The Kyoto College of Graduate Studies for Informatics, Japan

Dr., Shuangming Yang, Tianjin University, China

Prof., Mark J. Jackson, Kansas State University, USA

Dr., Narendra Londhe, National Institute of Technology (NIT) Raipur, India

Dr., Fathollah Bistouni, Islamic Azad University, Iran

Prof., Cheng Siong Chin, Newcastle University in Singapore, Singapore (IEEE Member)

Dr., Anand Nayyar, Duy Tan University, Vietnam

Prof., Samir LADACI, National Polytechnic School of Algiers, Algeria (IEEE Member)

Dr., Simon K.S. Cheung, Hong Kong Metropolitan University, China

Prof., Farid ABED-MERAIM, Arts et Métiers Science and Technology, France Dr., Jupeng Ding, Xinjiang University, China

Prof., WenTsai Sung, National Chin-Yi University of Technology, Taiwan, China

Dr., Basavanna M, GSSS Institute of Engineering & Technology for Women, India (IEEE RAS GSSSIETW Chapter Chair)

Dr., Sameer Faisal, COMSATS University Islamabad, Pakistan (IEEE RAS COMSATS University Islamabad Chapter Chair)

Prof., Filippo Sanfilippo, University of Agder (UiA), Norway (IEEE Robotics and Automation, Control Systems and Intelligent Transportation Systems Joint Chapter Chair)

Dr. Mutaz Ryalat, German Jordanian University (GJU), Jordan (IEEE RAS Jordan Chapter Chair)

Prof., Ioan-Lucian Popa,"1 Decembrie 1918" University Alba Iulia, 510009-Alba Iulia, Romania

Prof., Denis Sidorov, Russian Academy of Sciences, Russia (IEEE PES Russia Chapter Chair)

Dr., Xiaochun Cheng, Swansea University, UK

Prof., Anand Nayyar, Duy Tan University, Vietnam (IEEE / ACM Senior Member)

Associate Professor, Huanjie Tao, Northwestern Polytechnical University, China

Prof., Gyu Myoung Lee, Liverpool John Moores University, UK

Ass. Prof., Abdelhamied Ashraf Ateya, Zagazig University, Egypt

Associate Prof., Yassen Gorbounov, UNIVERSITY OF MINING AND GEOLOGY "ST. IVAN RILSKI", SOFIA (IEEE Senior Member)

Dr., IAN OKOTH, Technical University of Kenya, Kenya (IEEE RAS Technical University of Kenya Chapter Chair)

Prof., Jawaid Daudpoto, Mehran University of Engineering and Technology, Pakistan (IEEE Senior Member)

Prof., Manpreet Kaur, Manav Rachna University, India (IEEE Senior Member, IEEE Delhi Section, Membership Development Committee Member)

Dr., Prasenjit Banerjee, MuleSoft/Salesforce, US (IEEE Senior Member, IEEE ComSoc Chicago Chapter Chair)

Prof., Huanjie Tao, Northwestern Polytechnical University, China

5. Conference Schedule

Date	Time	Items
September 21, 2024 Saturday	8:45-9:00	Admission of Participants
	9:00-9:05	Opening Address
	9:05-11:05	Keynote Session
	11:05-11:50	Oral Presentations
	All day	E-posters Presentations

6. Detailed Program

	neu i rogram
	September 21, 2024(GMT +8)
Admission	of Participants
Online Con	ference Platform: Tencent meeting
Time	Content
8:45-9:00	Admission of Participants
9:00-9:05	Opening Address
Part I: Key	note Session
Time: 9:05-	-11:05
Time	Keynote
9:05-9:35	Speech Title: Graph & Blockchain-based Medical and Healthcare Data Fusion and Applications Speaker: Prof., Fang Hu, Hubei University of Chinese Medicine, China
9:35-10:05	Speech Title: Adversarial Variational Autoencoders toextend and improve generative model Speaker: Prof., Loc Nguyen, Loc Nguyen's Academic Network, Vietnam
10:05-10:35	Speaker: Associate Prof., Shiling Zhang, State Grid Chongqing Electric Power Company, China
10:35-11:05	Speech Title: Security Issues of Federated Learning Speaker: Prof., Maode Ma, Qatar University, Qatar
Part II: Or	al Session
Time: 11:05	5-11:50
Time	Presentation
11:05-11:20	Paper ID: C120 Title: Research on wind induced vibration of pillars under helicopter platform Speaker: Chengjun Li
11:20-11:35	Paper ID: C123 Title: A new large-scale steel bar mesh welding method using vision-guided robot system and application on bridge tower construction Author: Hong Zhang, Daohui Pan, Xiaoping Zhang, Jingyan Li, Min Wang
11:35-11:50	Paper ID: C183 Title: Key Technologies for General Design of Multipurpose Liftboat with Large Operational Air Gap Speaker: Mingsheng Xiahou

Part III: e-Poster Session	
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