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WELCOME MESSAGE

Dear Colleagues and Distinguished Guests,

On behalf of the organizing committees, we are delighted to extend our warmest welcome to the 2026 11th International Conference on Cloud Computing and Big Data Analytics (ICCCBDA 2026) and its affiliated workshop, the 2026 6th International Symposium on AI (ISAI 2026), taking place from April 24-26, 2026, in Chengdu, China.

As a premier international forum co-sponsored by the Sichuan Institute of Electronics and IEEE, ICCBDA 2026 brings together leading researchers, practitioners, and industry experts to share cutting-edge advancements in cloud computing, big data analytics, security and privacy, IoT, edge computing, and intelligent systems. Co-hosted by Southwest Jiaotong University, Xihua University, and University of Electronic Science and Technology of China, the conference features inspiring keynote speeches, peer-reviewed paper presentations, and vibrant discussions on frontier technologies and real-world applications.

Running concurrently as an integral workshop of ICCBDA 2026, ISAI 2026 provides a dedicated platform for exploring the latest innovations in artificial intelligence, machine learning, and intelligent systems. This symposium encourages interdisciplinary exchange among academia, industry, and government institutions, fostering collaboration that bridges theory and practice.

We are honored to host these events at the Tibet Hotel in Chengdu-a city renowned for its rich cultural heritage, technological vitality, and warm hospitality. We sincerely hope your participation will spark meaningful collaborations, inspire innovative ideas, and create lasting memories.

Thank you for joining us. We look forward to an engaging and successful conference!!

ICCCBDA 2026

Conference Committee

ORGANIZING COMMITTEE

International Advisory Committee -

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Yingqiao Pu, Deputy Secretary-general, Sichuan Institue of Electronics, China

Tao Xiang, Sichuan Institue of Electronics, China

Press Coordinator

Guoqing Deng, Sichuan Institue of Electronics, China

CONFERENCE VENUE

Tibet Hotel, Chengdu

(西藏饭店)

Address: North Renmin Road, Chengdu, Sichuan, China

TRAFFIC INFORMATION

➤ Departing from Chengdu Shuangliu International Airport

Subway: The whole journey is about 21 kilometers. First, take Subway Line 10, transfer to Subway Line 3 at Taipingyuan Station, then transfer to Subway Line 1 at Provincial Gymnasium Station. Get off at Renmin North Road Station, Exit B, and walk to Tibet Hotel.

Taxi/Online Car-hailing: The driving time is about 30 - 40 minutes, and the cost is about 60 - 80 yuan, depending on the traffic conditions and vehicle type.

Airport Shuttle Bus: You can take the airport shuttle bus to the urban area, and then transfer to the subway or take a taxi to the hotel after getting off at the appropriate stop.

➤ Departing from Chengdu Tianfu International Airport

Subway: The whole journey is about 64 kilometers. Take Subway Line 18, transfer to Subway Line 1 at South Railway Station, get off at Renmin North Road Station, Exit B, and walk to Tibet Hotel.

Taxi/Online Car-hailing: The driving time is about 50 - 60 minutes, and the cost is about 150 - 200 yuan. The actual cost will fluctuate due to traffic conditions.

Airport Shuttle Bus: Choose the airport shuttle bus line to the urban area, and then transfer to other means of transportation to the hotel.

GUIDELINES

- **Onsite Oral Presentation**

1. The duration of a presentation slot is 15 minutes. Please target your lecture for a duration of about 10 minutes for the presentation plus about 5 minutes for questions from the audience.
2. Your punctual arrival and active involvement in each session will be highly appreciated.
   - Get your presentation PPT or PDF files prepared and backed up.
3. Laptops, projector & screen, laser sticks will be provided by the conference organizer.

- **Poster Presentation**

1. The Size for poster is 650x1000mm, please print it out and bring it to the venue.
2. It's expected that at least one author stands by the poster for (most of the time of) the duration of the poster session. This is essential both to present your work to anyone interest in it and to make sure that your presence is verified by committee.

- **Online Presentation**

1. Meeting Rooms

ZOOM Meeting:

Password**: 042426**

Time Zone: China Standard Time (CST), UTC/GMT+8

2. Test Your Presentation

Date: **April 24, 2026**

Prior to the formal meeting, online presenters shall join the test room to ensure everything is on the right track. Please check your test Zoom Meeting ID on this program.

3. Oral Presentation

Please join the meeting room 10 minutes in advance.

Stay online during Keynote & Invited speeches and your own sessions. English Only during the conference. Rename your screen name before entering the room.

4. Follow us on We-chat **5. Photo Stream**

AGENDA OVERVIEW

All times in this schedule are listed in GMT+8,

April 24, 2026 | Friday		
Time	**Activity**	**Venue**
10:00-17:00	Onsite Sign-in & Conference Materials Collection	Lobby of Tibet Hotel
14:00-16:00	Online Sign-in & Equipment Testing	Password: 042426
14:00-16:00	Online Sign-in & Equipment Testing	Password: 042426

April 25, 2026 | Saturday		
Time	**Activity**	**Venue**
08:55-09:00	Opening Ceremony	Himalaya Hall 17F
09:00-09:05	Opening Remarks	
09:05-09:10	Welcome Address	
09:10-09:15	Conference Committee Address	
09:15-09:30	Group Photo	
Keynote Speech		
09:30-10:10	Keynote Speech **Prof. Jie Lu**, University of Technology Sydney, Australia ***Title: Machine Learning for Decision Support in Complex Environments***	Himalaya Hall 17F
10:10-10:25	Coffee Break	

10:25-11:05	**Keynote Speech** **Prof. Ning Zhong,** Web Intelligence Consortium (WIC), Maebashi Institute of Technology, Japan ***Title: TBA***	**Himalaya Hall 17F**
11:05-11:45	**Keynote Speech** **Prof. Yi Pan,** Shenzhen University of Advanced Technology, China ***Title: TBA***	**Himalaya Hall 17F**

11:45-13:30	Lunch	Yak Coffee Shop 2F
13:30-14:10	Keynote Speech (Online) **Prof. Jie Xu,** University of Leeds, UK ***Title: TBA***	Himalaya Hall 17F
14:30-16:00	Technical Session 1 - Data Ethics and Governance CB229, CB227, CB223, CB219, CB470, CB2012-A	Red Mountain Hall 17F
14:30-16:05	Technical Session 2: AI for Healthcare and Medical Applications Invited Speaker - Simon James Fong CB617, CB588, CB3046, CB471, CB608	Namtso Meeting Room 2F
14:30-16:00	Technical Session 3: Deep Learning for Computer Vision CB348, CB798, CB800, CB810, CB3040, CB3056	Manasarovar Meeting Room 2F
14:30-16:00	Technical Session 4: Natural Language Processing and Sentiment Analysis CB621, CB770, CB769, CB794, CB808, CB359	Yaamdrok Meeting Room 2F
14:30-16:00	Poster Session 1 - AI and Machine Learning Applications CB224, CB217, CB352, CB362, CB607, CB597, CB583, CB611, CB592, CB757, CB787, CB784, CB801, CB777, CB818, CB1002, CB1007-A, CB2037, CB2029, CB2021, CB2032, CB3049, CB3051, CB1008, CB3045, CB3050, CB4067, CB4057, CB2019, CB4072, CB4086	Himalaya Hall 17F
16:00-16:20	Coffee Break	
16:20-18:10	Technical Session 5: IoT, Edge Computing and UAV Systems Invited Speaker - Shunli Wang CB208, CB354, CB368, CB609, CB793, CB2036	Red Mountain Hall 17F
16:20-18:10	Technical Session 6: Cybersecurity and Fraud Detection CB357, CB595, CB606, CB809, CB585, CB817	Namtso Meeting Room 2F
16:20-18:10	Technical Session 7: Advanced AI and Emerging Technologies Invited Speaker - Xiaoping Qiu CB590, CB783, CB2028, CB4079-A, CB4078, CB4085	Manasarovar Meeting Room 2F
16:20-17:50	Technical Session 8: Cloud Computing and Security CB222, CB343, CB587, CB626, CB741, CB807	Yaamdrok Meeting Room 2F
16:20-18:10	Poster Session 2 - Cloud Computing, Security and Data Analytics CB230, CB361, CB364, CB367, CB356, CB350, CB337, CB336, CB365, CB586, CB578, CB589, CB604, CB605, CB603, CB619, CB799, CB796, CB805, CB797, CB790, CB814, CB815, CB816, CB2017, CB4064, CB4084, CB4082, CB4087, CB615	Himalaya Hall 17F
18:50	Banquet	Summer Hall

		4F

April 26, 2026 | Sunday		
Time	**Activity**	**Venue**
10:00-11:20	Online Session 1: AI for Healthcare and Medical Applications Invited Speaker - Radhakrishna Bhat CB225, CB612, CB1010, CB4088	Password: 042426
10:00-11:50	Online Session 2: Multimodal AI and Sentiment Analysis Invited Speaker - Anand Nayyar CB228, CB582, CB616, CB1006, CB4068, CB1004	Password: 042426
10:00-11:50	Online Session 3: Multi-Agent Systems and Orchestration Invited Speaker - Abhishek Kumar CB341, CB4070, CB355, CB623, CB765, CB4069	Password: 042426
11:50-14:00	Break	
14:00-15:35	Online Session 4: Federated Learning and Cybersecurity Invited Speaker - Pascal Lorenz CB353, CB795, CB213, CB214, CB2023	Password: 042426
14:00-15:35	Online Session 5: Cloud Computing and Data Management Invited Speaker - Anand Nayyar CB791, CB349, CB802, CB782, CB803	Password: 042426
14:00-15:35	Online Session 6: Financial Systems and Fraud Detection Invited Speaker - Paulo Batista CB360, CB572, CB728, CB599, CB4077	Password: 042426
15:35-16:00	Break	
16:00-17:50	Online Session 7: Large Language Models and Knowledge Graphs Invited Speaker - Vilem Novak CB622, CB786, CB2024, CB3054, CB3055, CB2035	Password: 042426
16:00-18:05	Online Session 8: Computer Vision and Object Detection Invited Speaker - Samir Brahim Belhaouari CB226, CB3047, CB3048, CB3053, CB4080, CB4066, CB4071	Password: 042426
16:00-18:05	Online Session 9: Edge Computing, IoT and Industrial Applications Invited Speaker - S.Anne Susan Georgena CB591, CB776, CB2020, CB4090, CB4076, CB4083, CB581	Password: 042426

KEYNOTE SPEAKER

09:30-10:10 | Himalaya Hall

Jie Lu

Professor at University of Technology Sydney, Australia
IEEE Fellow, IFSA Fellow, Australian Laureate Fellow, Australian Industry Laureate Fellow
Director of Australian Artificial Intelligence Institute
Director of Australian Research Council Research Hub in Responsible AI for a Sustainable Grain Industry (gRAIn)

Biography: Distinguished Professor Jie Lu is a world-renowned scientist in the field of computational intelligence, best known for her contributions to fuzzy machine learning, transfer learning, concept drift, recommender systems, and decision support systems. She is an IEEE Fellow, IFSA Fellow, Australian Laureate Fellow, and Australian Industry Laureate Fellow. Professor Lu is the Director of the Australian Artificial Intelligence Institute (AAII) and Director of Australian Research Council (ARC) Research Hub in Responsible AI for a Sustainable Grain Industry (gRAIn) at the University of Technology Sydney (UTS), Australia. She has published six research books and over 500 papers in leading journals and conferences; won ten ARC Discovery Projects, one ARC Linkage Project as Lead Chief Investigator, an ARC Research Hub in Responsible AI for a Sustainable Grain Industry (gRAIn) as the Director, and over 20 industry-funded projects; and supervised 60 doctoral students to completion. Professor Lu also serves as Editor-in-Chief of Knowledge-Based Systems and the International Journal of Computational Intelligence Systems. She is a highly sought-after keynote speaker and has delivered over 40 keynote addresses at major international conferences. Her honours include three IEEE Transactions on Fuzzy Systems Outstanding Paper Awards (2019, 2022, 2025), the NeurIPS 2022 Outstanding Paper Award, Australia's Most Innovative Engineer Award (2019), the Australasian Artificial Intelligence Distinguished Research Contribution Award (2022), the NSW Premier's Prize for Excellence in Engineering or Information and Communication Technology (2023), and appointment as an Officer of the Order of Australia (AO) in the 2023 Australia Day.

Speech Title: Machine Learning for Decision Support in Complex Environments

Abstract: This talk will present how advanced machine learning can innovatively and effectively learn from complex data to support data-driven decision-making in uncertain and dynamic environments. A set of new autonomous transfer learning theories, methodologies, and algorithms will be introduced to enable knowledge transfer from multiple source domains to a target domain through the construction of latent spaces, mapping functions, and self-training mechanisms, thereby addressing substantial uncertainties in data, learning processes, and decision outputs. In addition, a new suite of theories, methodologies, and algorithms for concept drift detection, understanding, and adaptation will be discussed, focusing on how to manage continuously evolving data stream environments with unpredictable pattern changes. These

approaches can detect concept drift accurately and in an explanatory manner, identifying when, where, and how drift occurs and enabling timely adaptive responses. These advanced machine learning capabilities have been applied to develop a range of real-world applications across multiple industry sectors, significantly strengthening data-driven prediction and decision support systems.

KEYNOTE SPEAKER

11:05-11:50 | Himalaya Hall

Yi Pan

Professor at Shenzhen University of Advanced Technology, China

Biography: Yi Pan is currently a Chair Professor and the Dean with the College of Computer Science and Control Engineering, Shenzhen University of Advanced Technology, Shenzhen, China, and a Regents' Professor Emeritus with Georgia State University, Atlanta, GA, USA. From 2005 to 2020, he was the Chair with Computer Science Department, Georgia State University. During 2013-2017, he was also the Interim Associate Dean and Chair with Biology Department. In 2000, he joined Georgia State University, was promoted to Full Professor in 2004, named a Distinguished University Professor in 2013, and Designated a Regents' Professor (the highest recognition given to a Faculty Member by the University System of Georgia) in 2015. He has authored or coauthored more than 450 papers including more than 250 journal papers with more than 100 papers published in IEEE/ACM Transactions/Journals and has also edited/authored 43 books. His work has been cited more than 27000 times based on Google Scholar and his current H-index is 98. Dr. Pan is also the Editor-in-Chief of Big Data Mining and Analytics (a top 3% journal), Associate Editor-in-Chief of Journal of Computer Science and Technology (JCST), and Chinese Journal of Electronics (CJE). He was the Editor-in-Chief or Editorial Board Member for 20 journals including seven IEEE Transactions.

Speech Title: TBA

Abstract: TBA

KEYNOTE SPEAKER

13:30-14:10 | Himalaya Hall

Jie Xu

Professor at University of Leeds, UK

Biography: Jie Xu is Chair of Computing at the University of Leeds, Director of the UK White Rose Grid e-Science Centre, involving the three White Rose Universities of Leeds, Sheffield and York, a co-Leader of the EPSRC-funded UK National Hub in Clouds and Distributed Computing, and Head of the Distributed Systems and Services (DSS) Theme at Leeds. Xu has worked in the field of Distributed Computing Systems for over forty years, engaging closely with industrial leaders in the field. He received a PhD in Computing Science from the University of Newcastle upon Tyne, and was Professor of Distributed Systems at the University of Durham before joined Leeds in 2003.

Professor Xu is an executive member of UKCRC (UK Computing Research Committee) and a Turing Fellow in AI and Data Science. He has served as an academic expert for numerous governments and industries, such as Singapore IDA, Lenovo, UK EPSRC, UK DTI (InnovateUK), and Research Ireland. In addition, he has extensive editorial experience, having served as an editor for IEEE Distributed Systems from 2000 to 2005, and currently acting as an associate editor of IEEE Transactions on Parallel and Distributed Systems and ACM Computing Surveys. Professor Xu is currently the Steering Committee Chair of IEEE ISADS, a Steering Committee member for several IEEE conferences, such as SRDS, ISORC, HASE, SOSE, JCC, and CISOSE, as well as serving on the steering board of IEEE TC on BIS. He has also been a General Chair/PC Chair for various IEEE international conferences. With over 300 academic publications, including papers in top-ranked IEEE and ACM Transactions, Professor Xu has received international research prizes, such as the BCS/AT&T Brendan Murphy Prize and HiPEAC Transfer Award 2025, and led or co-led more than 20 research projects worth over £30M. He is also the co-founder of two university spinouts specializing in data analytics and AI software for optimizing data-centre performance, as well as in co-simulation and digital-twin technologies, and is the founding co-director of ACE3 AI Ltd.

Speech Title: TBA

Abstract: TBA

KEYNOTE SPEAKER

11:05-11:50 | Himalaya Hall

Ning Zhong

Professor at Web Intelligence Consortium (WIC), Maebashi Institute of Technology, Japan

Biography: Ning Zhong received a Ph.D. degree from the University of Tokyo. He currently holds positions as the chairman of the Web Intelligence Consortium (WIC, wi-consortium.org), senior professor of engineering at Maebashi Institute of Technology, Japan. His research interests focus on Web Intelligence, Brain Informatics, machine learning, data mining, intelligent health echnologies, and intelligent systems. He serves as the editor-in-chief of the Brain Informatics journal (Springer Nature). He is a foreign fellow of the Engineering Academy of Japan (EAJ) and a member of the National Academy of Artificial Intelligence (NAAI).

Speech Title: TBA

Abstract: TBA

INVITED SPEAKER

14:00-14:20 | Namtso Meeting Room

Simon James Fong (Onsite)

University of Macau, China

Biography: Simon James Fong graduated from La Trobe University, Australia, with a 1st Class Honours BEng in Computer Systems and a PhD in Computer Science in 1993 and 1998, respectively. Simon was a senior consultant at Hong Kong Telecom in 1998. He is now working as an Associate Professor at the University of Macau. He is also an Adjunct Professor at Durban University of Technology, South Africa, and a Senior Visiting Scholar at Tsinghua University, Beijing. Dr. Fong has published over 500 international conference and journal papers, mostly in the areas of machine learning and IoT technology. He serves actively as the IEEE ComSoc e-Health SIG Chair and an IEEE CIS member.

Speech Title: Federated Learning for Secure AI-Driven Clinical Collaboration: Toward Virtual Doctors Across Regions

Abstract: Federated learning has emerged as a cornerstone technology for enabling AI-assisted healthcare while safeguarding patient confidentiality. In this keynote, I will present recent advances in privacy-preserving and resource-aware federated learning frameworks that support collaborative diagnosis and clinical decision-making across hospitals, cities, and even countries—without requiring sensitive medical data to be transferred over networks. Building on our SecFedGate architecture, we show how adaptive multimodal fusion, ontology-guided knowledge integration, and formally verified privacy mechanisms can power “virtual doctors” capable of learning from distributed experiences while ensuring security against adversarial threats. These innovations not only improve diagnostic accuracy and robustness under heterogeneous clinical environments but also establish new foundations for trusted AI collaboration in healthcare. The talk will highlight real-world implications for secure cross-institutional medical AI, advancing global healthcare collaboration without compromising privacy.

16:00-16:20 | Red Mountain Hall

Shunli Wang (Onsite)

Sichuan University, China

Biography: Shunli Wang is a Professor, Doctoral Supervisor at Sichuan University, Academic Dean at Inner Mongolia University of Technology, Executive Vice President at Smart Energy Storage Institute, Deputy General Manager of Daqingshan Laboratory in Inner Mongolia Electric Power Group, Fellow of the Royal Society of Arts and Crafts (RSA Fellow), Fellow of the Institute of Engineering and Technology (IET Fellow), IEEE Senior Member, PCIM Asia Committee Member, IEEE PES Committee Member, Academic Leader of National Electrical Safety and Quality Testing Center, Tianfu Qingcheng Scientific and Technological Talent, High-level Overseas Talent, Tianfu A Talents, Academic & Technical Leader of Chinese Science and Technology City, Top 2% Worldwide Scientist, Global Highly Cited Researcher. Focusing on the major national strategic needs of new energy and energy storage systems, the research of green and low-carbon energy storage is conducted in smart grids, undertaken 56 projects such as the National Natural Science Foundation and National Key Research & Development, with a Research Interest Score value of 14995, and 258 articles published on SCI-indexed famous journals with 53 articles in the First Area / TOP journals in Chinese Academy of Sciences, 42 high-cited / hot ones, 23 international and domestic invention patents, 20 software Copyrights and standard formulation and 9 books have been published by first-class international and domestic publishing houses. 10 awards at or above the provincial or ministerial level have been achieved, including 3 international gold medals.

Speech Title: Cloud Computing and Its Application In State Estimation of New Power Storage Systems

Abstract: Cloud computing and its application in state estimation of new power storage systems is not yet fully mature, facing numerous technical bottlenecks and challenges. This report delves into the methods of multi-time scale state monitoring and evaluation for energy storage and the new power system, aiming to achieve reliable monitoring of core state parameters. It constructs an electro-thermal-electrochemical multi-feature composite optimization model to accurately characterize the internal characteristics of batteries, breaking through the difficulties of dynamic response of electrical parameters and nonlinear analysis of electrical characteristics. A new algorithm for multi-dimensional information fusion online estimation is proposed, breaking through the bottleneck of collaborative prediction of multi-time scale state parameters. It achieves innovation in real-time monitoring and early warning of core state parameters, significantly enhancing the reliability of safety monitoring for energy storage systems. A dual amplification isolation and multiple EMC protection mechanism is formed, tackling extreme new energy and energy storage challenges from the device level to the system level. A smart new energy storage system is constructed, realizing the application of multi-time scale state monitoring and evaluation for energy storage and the new power system.

16:00-16:20 | Manasarovar Meeting Room

Xiaoping Qiu (Onsite)

Southwest Jiaotong University, China

Biography: Dr. Xiaoping Qiu received the B.E. in automobile and M.E. degrees in vehicle engineering and the Ph.D. degree in traffic information engineering and control from Southwest Jiaotong University, Chengdu, China, in 1997, 2000, and 2004, respectively. He is currently a professor and the director of the department of artificial intelligence with the school of computing and artificial intelligence, Southwest Jiaotong University. He also serves as the deputy director of the national-local joint engineering laboratory of comprehensive intelligent transportation. His research interests include supply chain information management and integration, industrial chain knowledge management and collaboration, and logistics system simulation and optimization. He has authored over 140 academic papers, including more than 70 as the first author, with over 100 indexed by SCI, EI, and ISTP. He has published 17 monographs/textbooks and filed 10 invention patents (8 granted). He has led more than 10 national-level projects, including national Key R&D programs, national natural science foundation of China, and national social science foundation of China, as well as nearly 20 provincial/ministerial projects. He was selected as a "Sishi Star" of Southwest Jiaotong university in 2009, a reserve candidate for Sichuan provincial academic and technical leader in 2010, a Sichuan provincial logistics expert in 2014, and an outstanding educator of Southwest Jiaotong university in 2019. He served as a review expert for the national key R&D program on new generation artificial intelligence in 2022.

Speech Title: CSO operational monitoring system and key technologies for hot product supply chain

Abstract: The operational monitoring of hot product supply chain is different from others. Based on the management requirements of CSO (chief supply chain officer), the paper starts the 4-stage lifecycle of hot product firstly includes introduction, growth, mature, and decline, followed by 5-aspect operational monitoring of it includes supply, inventory, lifecycle, sale and order. Then the key technologies related to those aspects are introduced with the evaluating indicators of hot product supply chain, and the cloud software frame of the system is cooperated the cooresponding data model. Finally, the designed interfaces are demostrated with future knowledge management.

Pascal Lorenz

University of Haute-Alsace, France

Biography: Pascal Lorenz (lorenz@ieee.org) received his M.Sc. (1990) and Ph.D. (1994) from the University of Nancy, France. Between 1990 and 1995 he was a research engineer at WorldFIP Europe and at Alcatel-Alsthom. He is a professor at the University of Haute-Alsace, France, since 1995. His research interests include QoS, wireless networks and high-speed networks. He is the author/co-author of 3 books, 3 patents and 200 international publications in refereed journals and conferences. He was Technical Editor of the IEEE Communications Magazine Editorial Board (2000-2006), IEEE Networks Magazine since 2015, IEEE Transactions on Vehicular Technology since 2017, Chair of IEEE ComSoc France (2014-2020), Financial chair of IEEE France (2017-2022), Chair of Vertical Issues in Communication Systems Technical Committee Cluster (2008-2009), Chair of the Communications Systems Integration and Modeling Technical Committee (2003-2009), Chair of the Communications Software Technical Committee (2008-2010) and Chair of the Technical Committee on Information Infrastructure and Networking (2016-2017), Chair of IEEE/ComSoc Satellite and Space Communications Technical (2022-2023), IEEE R8 Finance Committee (2022-2023), IEEE R8 Conference Coordination Committee (2023). He has served as Co-Guest Editor for special issues of IEEE Communications Magazine, Networks Magazine, Wireless Communications Magazine, Telecommunications Systems and LNCS. He is associate Editor for International Journal of Communication Systems (IJCS-Wiley), Journal on Security and Communication Networks (SCN-Wiley) and International Journal of Business Data Communications and Networking, Journal of Network and Computer Applications (JNCA-Elsevier)

Speech Title: Architectures of Next Generation Wireless Networks

Abstract: Internet Quality of Service (QoS) mechanisms are expected to enable wide spread use of real time services. New standards and new communication architectures allowing guaranteed QoS services are now developed. We will cover the issues of QoS provisioning in heterogeneous networks, Internet access over 5G networks and discusses most emerging technologies in the area of networks and telecommunications such as IoT, SDN, Edge Computing and MEC networking. We will also present routing, security, baseline architectures of the inter-networking protocols and end-to-end traffic management issues.

Anand Nayyar

Duy Tan University, Viet Nam

Biography: Anand Nayyar received Ph.D (Computer Science) from Desh Bhagat University in 2017 in the area of Wireless Sensor Networks, Swarm Intelligence and Network Simulation. He is currently working in School of Computer Science-Duy Tan University, Da Nang, Vietnam as Professor, Scientist, Vice-Chairman (Research) and Director- IoT and Intelligent Systems Lab. A Certified Professional with 280+ Professional certifications from CISCO, Microsoft, CompTIA, Amazon, Alibaba Cloud, Oracle, Google, Salesforce, Tableau, FinOps, Beingcert, EXIN, GAQM, Cyberoam and many more. Published more than 300+ Research Papers in various High-Quality ISI-SCI/SCIE/SSCI Impact Factor- Q1, Q2, Q3, Q4 Journals cum Scopus/ESCI indexed Journals, 80+ Papers in International Conferences indexed with Springer, IEEE and ACM Digital Library, 60+ Book Chapters in various SCOPUS/WEB OF SCIENCE Indexed Books with Springer, CRC Press, Wiley, IET, Elsevier with Citations: (Google Scholar):23000+, H-Index: 77 and I-Index: 311; (Scopus): 12700+; H-index: 60. Member of more than 60+ Associations as Senior and Life Member like: IEEE (Senior Member) and ACM (Senior Member). He has authored/co-authored cum Edited 70+ Books of Computer Science. Associated with more than 600+ International Conferences as Programme Committee/Chair/Advisory Board/Review Board member. He has completed 1 Grassroot and 1 ASEAN Project. He has 18 Australian Patents, 16 German Patents, 4 Japanese Patents, 44 Indian Design cum Utility Patents, 13 UK Patents, 1 USA Patent, 3 Indian Copyrights and 2 Canadian Copyrights to his credit in the area of Wireless Communications, Artificial Intelligence, Cloud Computing, IoT, Healthcare, Drones, Robotics and Image Processing.

Speech Title: DataOps Engineering: A 9-Phase Framework for Building Agile, Automated Data Pipelines and Maximizing Data Science Impact

Abstract: This lecture presents a comprehensive, practitioner-oriented exposition on DataOps-a methodology that converges Agile development, DevOps principles, and statistical process control to orchestrate end-to-end data pipeline automation and amplify data science throughput. We delineate a rigorous 9-step transformation framework encompassing environment provisioning, version-controlled data lineage, continuous integration/continuous deployment (CI/CD) for analytical workflows, automated data quality validation through schema enforcement and anomaly detection, infrastructure-as-code (IaC) orchestration, containerized model serving, observability-driven monitoring via telemetry instrumentation, cross-functional governance, and feedback-loop optimization for iterative model retraining. The discourse further examines best practices in constructing fault-tolerant, idempotent, and horizontally scalable ETL/ELT pipelines leveraging directed acyclic graph (DAG)-based orchestration engines, event-driven microservices architectures, and declarative data transformation paradigms. Key topics include metadata-driven pipeline parameterization, data contract enforcement across producer-consumer boundaries, SLA-aware scheduling, drift detection mechanisms, and reproducibility

guarantees through deterministic execution environments. Attendees will gain actionable insights into reducing pipeline technical debt, minimizing mean-time-to-recovery (MTTR), achieving sub-linear operational overhead scaling, and establishing a culture of continuous improvement through DataOps maturity modeling. This lecture bridges the gap between theoretical data engineering constructs and production-grade implementation patterns for enterprise-scale analytical ecosystems.

Paulo Batista

University of Évora, Portugal

Biography: Current director of the Arquivo Nacional Torre do Tombo, he was senior technician positions at the Instituto de Arquivos Nacionais/Torre do Tombo, Instituto Português do Património Cultural and the Instituto Português do Património Arquitetónico. He has also worked as researcher at the Instituto de Investigação Científica Tropical – Centro de Estudos de História e Cartografia Antiga, and as professor at the MS program in Information Science and Documentation at Universidade NOVA de Lisboa (UNL).

Speech Title: Action Research and Case Studies in Information Science

Abstract: Following the Second World War an explosion in the quantity of documentation led to a dramatic change in Archiving, or the profession referred to as records managers/records management and archivists/archives. Starting in the 1980s, however, archivists in Quebec began to make great progress by changing their approach and looking at the entire documentary cycle from current to definitive information. Carol Couture and Jean- Yves Rousseau made a crucial contribution towards the understanding of the Three Age Theory that viewed Archiving as an integrated discipline centered on a structural understanding of archives. In 1994, their work Les Fondements de la Discipline Archivistique, presented a new interpretation of Theodore Schellenberg's Three Age Theory. They called attention to the fact that the three phases of archival documents are not separate but, on the contrary, integrated. They argued that these three stages can even be looked at in a segmented way, provided the union between them is ensured. Their great innovation relative to Schellenberg's work lay, precisely, in critiquing the division and separation between the three ages of archival documents. Couture and Rousseau thereby brought together all the phases of the lifecycle of records, from production to dissemination, in opposition to the sterile distinction advocated by traditional archivists and document managers. In my opinion, however, the best approach to integrating information management is known as records continuum, which place archives in a post-custodial, informational, and scientific paradigm. This Australian concept arose in the 1990s amid the huge explosion of information, communication technologies and new media. This context forced Information Science to redefine its object of study. Records continuum is closely related to the integrated management model of Couture and Rousseau, while it carries their innovation further, perfecting it and replacing it with systemic dynamics and providing continuity between archives. In fact, records continuum means, literally, continuous management. It looks at the whole process from the production of records to their final archiving. Otherwise, we cannot speak of continuous management. That is why, when we speak of rigid archives – current, intermediate, and definitive, this approach is more theoretical than practical. There is, in fact, no

separation between these phases, even less so from the point of view of the value of documents. The traditional distinction between information with probative and historical value ceases to exist. The information is simultaneous and is, in fact, the same.

Radhakrishna Bhat

Manipal Institute of Technology, India

Biography: Dr. RADHAKRISHNA BHAT received his Ph.D. degree from Visveswaraya Technological University, Belagavi, India. He is currently working as an Associate Professor with the School Computer Engineering, Manipal Institute of Technology, Manipal Academy of Higher Education (MAHE), Manipal, India. He is an active researcher who has published many scientific research papers in reputed journals and conferences. He is serving as editorial board member for many peer-reviewed journals including PLOS ONE, Journal of Cybersecurity and Privacy, Intelligent Decision Technologies. He is the active technical program committee member for premier conferences including ICISSP, ICOIN, COMSNETS, IEA/AIE. Currently, he is guiding Ph.D research scholars on various topics including information security, high-performance computing, and deep learning.

Speech Title: Decentralized Privacy-Preserving Federated Multi-Architecture Deep Ensemble Framework for Lung Cancer

Abstract: Early detection of lung cancer improves patient survival outcomes and identifies the most effective treatment options. Deep learning models have played a vital role in lung cancer classification with significant drawbacks about centralized systems, including single points of failure, scaling issues across healthcare networks, and limited access to multi-institutional datasets. Our study presents a blockchain-coordinated federated learning framework that enables secure multi-hospital collaboration to increase the precision of diagnosis. In this approach, we integrate three pre-trained convolutional neural network (CNN) models and develop a meta-model ensemble architecture, ensuring privacy protection of sensitive data by differential privacy. By using an interplanetary file system (IPFS) for decentralized model storage and ethereum smart contracts for transparent coordination, the proposed methodology removes single points of failure and permits multiple institutions to collaboratively develop models.

Vilem Novak

University of Ostrava, Czech Republic

Biography: Prof. Vilém Novák, Ph.D., DSc. is the founder and former director of the Institute for Research and Applications of Fuzzy Modeling of the University of Ostrava. He obtained PhD in mathematical logic at Charles University, Prague in 1988; DSc. (Doctor of Sciences) in computer science in the Polish Academy of Sciences, Warsaw in 1995; full professor at Masaryk University, Brno in 2001. His research activities include mathematical fuzzy logic, approximate reasoning, mathematical modeling of linguistic semantics, fuzzy control, analysis and forecasting of time series, and various kinds of fuzzy modeling applications. He belongs among the pioneers of the fuzzy set theory. He was general chair of the VIIth IFSA'97 World Congress, Prague and of the international conferences EUSFLAT 2007, Ostrava and EUSFLAT 2019, Prague. He is a member of the editorial boards of several scientific journals. He is often invited to give plenary talks at international conferences and to give lectures in universities worldwide. He is the author or co-author of 6 scientific monographs, two edited monographs, and over 350 scientific papers with more than 10000 citations. He was awarded in the International Conference FLINS 2010 in China and in 2017, he obtained the title "IFSA fellow". He is currently the vice-president of IFSA.

Speech Title: Fuzzy Natural Logic and Generalized Quantifiers in AI

Abstract: Artificial Intelligence includes many theories and methods that are capable of performing tasks associated with human intelligence. Among them, the leading role is played by techniques of machine learning and neural networks. We argue that important role in AI plays also formal logic. In this talk we will mention the concept of Fuzzy Natural Logic (FNL) that is a system of theories of mathematical fuzzy logic enabling us to model special ways of human reasoning that is based on the use of natural language. FNL stems from the results of classical linguistics, logical analysis of concepts and semantics of natural language and is formalized using higher-order mathematical fuzzy logic.

A constituent of FNL is the theory of generalized quantifiers that are special natural language expressions using which we quantify the number of elements in various contexts. Typical examples are ``Many, most, a lot of, a few, several, almost all'' that form a subclass called ``intermediate quantifiers''. In this talk we will present results obtained in a formal theory of the latter. We will also describe reasoning using generalized syllogisms in which intermediate quantifiers occur. We argue that methods of formal logic are indispensable for their theory because using the latter we can distinguish valid syllogisms from those which are not valid and, therefore, cannot be used in human reasoning. We will also show that AI without logic fails when checking validity of syllogisms. We will demonstrate valid as well as invalid syllogisms on examples. Along with it, we will discuss graded square of opposition as a general scheme for human reasoning.

Finally we will touch non-monotonic reasoning and show that our theory is capable of solving typical problems of it. Namely, we will prove that the classical example ``Most birds fly'' and ``Tweety is a penguin which does not fly'' does not lead to contradiction in our theory. We argue that this is the consequence of capability of FNL to model the meaning of vague concepts.

Samir Brahim Belhaouari

Hamad Bin Khalifa University, Qatar

Biography: Dr. Samir Brahim Belhaouari is a faculty member in the Division of Information & Computing Technology at Hamad Bin Khalifa University (HBKU), Qatar. He received his Ph.D. in Mathematical Sciences from EPFL, Switzerland, and his MSc in Networks and Telecommunications from INP/ENSEEIHT, France. With international academic experience across Europe, the Middle East, Russia, and Asia, he has developed a strong global research profile.His work spans mathematics, machine learning, and data science, with notable contributions in classification, GenAI, feature selection, data preprocessing, and optimization. He is the creator of the Multilevel Architecture of Deep Learning (MADL), a framework that enhances neural network training efficiency and performance. He has also developed novel algorithms for time-frequency decomposition, model compression, Green AI, and image/graph representation, as well as an enhanced hashing function inspired by mathematical conjectures.

Dr. Belhaouari has served as principal investigator on major research projects funded by Qatar, Russian, and Malaysia, and his contributions have earned him multiple international awards, including medals at global innovation exhibitions. With over 300 publications, more than 5,000 citations, and an H-index of 36, he continues to influence both theoretical and applied aspects of AI, delivering innovative solutions that bridge mathematics, sustainability, and advanced computing.

Speech Title: Leveraging Mathematics to Address AI and Security Challenges

Abstract: Solving complex computer science problems becomes more manageable by harnessing the power of unsolved mathematical puzzles and inspiration from nature. Mathematics provides the foundation for crafting advanced algorithms in optimization, hashing, data compression, and model refinement, which are essential for tackling a wide range of challenges in artificial intelligence (AI) and cybersecurity. This talk will explore several key projects that illustrate the pivotal role of mathematics in addressing these issues.

Highlights include smart pruning techniques for deep neural networks (Green LLMs, CNNs, etc.), Green AI from Deep to shallow learning, the Walking Algorithm for Longitudinal Key Signatures (WALKS), and optimizing dimensionality reduction and visualization using enhanced clustering and optimal transport.

We will also discuss a novel time-frequency decomposition, KNNOR-a method for oversampling and downsampling imbalanced datasets—and chaos-based hashing combined with Gaussian Kernel LSH for improved data security and similarity search. Other topics include feature selection for high-dimensional data, extending the Komlós Conjecture for categorical variable encoding, and various deep learning innovations, such as architectural designs, fine-tuning methods, specialized loss functions, and activation functions. Additionally, we'll cover anomaly

detection, clustering techniques, and a dynamic Markov Chain coupled with reinforcement learning for optimization and feature selection. Applications of these techniques in biomedical and bioinformatics domains will be examined, along with the use of number theory in security, particularly in hashing and RSA encryption. Through these projects, we demonstrate how mathematical insights lead to cutting-edge solutions in AI and cybersecurity

Anand Nayyar

Duy Tan University, Vietnam

Biography: Dr. Anand Nayyar received Ph.D (Computer Science) from Desh Bhagat University in 2017 in the area of Wireless Sensor Networks, Swarm Intelligence and Network Simulation. He is currently working in School of Computer Science-Duy Tan University, Da Nang, Vietnam as Professor, Scientist, Vice-Chairman (Research) and Director- IoT and Intelligent Systems Lab. A Certified Professional with 250+ Professional certificates. Published more than 250+ Research Papers in various High-Quality ISI-SCI/SCIE/SSCI Impact Factor Journals cum Scopus/ESCI indexed Journals, 100+ Papers in International Conferences indexed with Springer, IEEE and ACM Digital Library, 80+ Book Chapters with Citations: 21000+, H-Index: 75 and I-Index: 300. He has 18 Australian Patents, 16 German Patents, 4 Japanese Patents, 44 Indian Design cum Utility Patents, 1 USA Patent, 3 Indian Copyrights and 2 Canadian Copyrights to his credit. Awarded 55 Awards for Teaching and Research. He is listed in Top 2% Scientists as per Stanford University (2019, 2020, 2021, 2022, 2023, 2024). He is Listed on Research.com (No:2 in Viet Nam; D-INDEX: 46). He is acting as Managing Editor of IGI-Global, USA Journal titled "IJKSS" - Scopus Q3 Indexed.

Speech Title: From Multimodal LLM to Human-level AI

Abstract: This keynote explores the rapidly evolving journey from multimodal large language models (LLMs) toward human-level AI, highlighting both the extraordinary progress achieved and the scientific challenges that remain. Recent advances in multimodal foundation models have enabled AI systems to process and reason across text, images, audio, video, code, and sensor data, opening new possibilities for intelligent assistants, autonomous systems, scientific discovery, healthcare, education, robotics, and smart infrastructure. The talk examines how multimodal LLMs are transforming from language-centric systems into more general-purpose cognitive architectures capable of perception, reasoning, planning, memory integration, tool use, and adaptive decision-making. It will discuss the core technologies driving this transition, including transformer-based architectures, retrieval-augmented generation, agentic workflows, multimodal fusion, reinforcement learning, and neuro-symbolic reasoning. At the same time, the keynote will address critical limitations such as hallucination, contextual inconsistency, lack of grounded understanding, interpretability challenges, safety risks, and constraints in long-horizon autonomy.

By connecting current research trends with future directions, this keynote provides a balanced perspective on what it would take to move beyond today's powerful yet narrow systems toward AI that more closely resembles human-level intelligence. The session will emphasize not only capability expansion, but also the importance of trustworthy, explainable, aligned, and human-centered AI for real-world deployment and societal benefit.

Abhishek Kumar

Chandigarh University Punjab, India

Biography: Dr. Abhishek Kumar, Senior Member of IEEE, is an Assistant Director and Professor in the Computer Science & Engineering Department at Chandigarh University, Punjab, India.and Senior researcher in Ingeniot lab UCLM Spain.With over 14 years of teaching experience, he has published 200+ peer-reviewed papers and successfully supervised 6 Ph.D. scholars, , along with 48+ M.Tech projects. He holds postdoctoral research at Universidad de Castilla-La Mancha, Spain. His research interests span artificial intelligence, renewable energy systems, image processing, and data mining. An award-winning researcher, Dr. Kumar has received several accolades, including the Sir C.V. Raman National Award (2018), and holds a patent. An accomplished author and editor, he has authored seven books and edited 97 volumes with reputed publishers like IET, Elsevier, Wiley, Springer, and De Gruyter. Dr. Kumar also serves as Series Editor for book series.

Speech Title: Multi-Agent Generative AI for Renewable Integration and Grid Operations

Abstract: Rapid renewable penetration is increasing variability and operational complexity across power systems, while electrification and rising AI-driven loads intensify the need for reliability, flexibility, and resilience. This paper proposes an AI-centric framework that unifies (i) foundation-model and generative-AI assistants for operator decision support and automated workflow orchestration, (ii) real-time digital twins to mirror grid and renewable-asset states for what-if analysis and predictive maintenance, and (iii) reinforcement-learning control for adaptive dispatch, microgrid energy management, and storage coordination under uncertainty. We synthesize recent advances in renewable forecasting and control-highlighting how modern AI can improve solar/wind prediction accuracy and enable multi-objective optimization balancing cost, emissions, and resilience. Finally, we discuss deployment considerations-data governance, cybersecurity, and model validation-emphasizing safe integration of AI into critical infrastructure and measurable pathways to accelerate the renewable energy transformation at scale.

S.Anne Susan Georgena

Sri Ramakrishna Institute of Technology, India

Biography: Dr. Abhishek Kumar, Senior Member of IEEE, is an Assistant Director and Professor in the Computer Science & Engineering Department at Chandigarh University, Punjab, India.and Senior researcher in Ingeniot lab UCLM Spain.With over 14 years of teaching experience, he has published 200+ peer-reviewed papers and successfully supervised 6 Ph.D. scholars, , along with 48+ M.Tech projects. He holds postdoctoral research at Universidad de Castilla-La Mancha, Spain. His research interests span artificial intelligence, renewable energy systems, image processing, and data mining. An award-winning researcher, Dr. Kumar has received several accolades, including the Sir C.V. Raman National Award (2018), and holds a patent. An accomplished author and editor, he has authored seven books and edited 97 volumes with reputed publishers like IET, Elsevier, Wiley, Springer, and De Gruyter. Dr. Kumar also serves as Series Editor for book series.

Speech Title: Modeling and Analysis of Unsteady Hydromagnetic Flows with Radiative and Newtonian Thermal Conditions

Abstract: The modeling of multi-physical transport phenomena involving magnetic fields and thermal effects is essential in advanced engineering and high-temperature industrial systems. This lecture presents a comprehensive analysis of unsteady hydromagnetic (MHD) boundary layer flows over stretching and shrinking surfaces incorporating radiative heat transfer and Newtonian heating conditions. Advanced computational modeling plays a critical role in understanding complex transport phenomena encountered in modern engineering systems. This lecture presents a detailed numerical investigation of unsteady hydromagnetic (MHD) boundary layer flows over stretching and shrinking surfaces incorporating radiative heat transfer and Newtonian heating effects.The mathematical formulation considers a two-dimensional, viscous, incompressible, electrically conducting fluid subjected to a transverse magnetic field. Thermal radiation is modeled using the Rosseland approximation, while convective surface heating is represented through Newtonian heating conditions. The governing nonlinear partial differential equations are transformed into similarity-based ordinary differential equations and solved using an efficient fourth-order Runge–Kutta shooting algorithm coupled with an iterative boundary correction scheme.A comprehensive parametric analysis is performed to examine the influence of magnetic interaction, radiation parameter, unsteadiness, suction, Biot number, viscous dissipation, slip effects, and chemical reaction on velocity, temperature, and concentration distributions. The results reveal strong nonlinear coupling between magnetic damping and thermal enhancement mechanisms.The study demonstrates how advanced numerical techniques and intelligent computational frameworks can be employed to analyze multi-physics transport processes, offering insights relevant to high-temperature materials processing, energy systems, plasma engineering, and thermally optimized industrial designs.