2024 IEEE Smart World Congress

Metaverse Unleased: AI on Cyber Worlds

Welcome to "Metaverse Unleashed: AI on Cyber Worlds," a thought-provoking panel exploring the transformative intersection of artificial intelligence and the metaverse. As leading tech giants like Meta, Google, Nvidia, and Microsoft make unprecedented investments in metaverse development, this digital frontier is reshaping how humans interact with technology and one another. The global metaverse market is projected to soar to $936.6 billion by 2030, underscoring its immense potential and far-reaching influence. AI lies at the heart of this evolution, driving innovations such as dynamic world-building, hyper-realistic avatars, personalized interactions, adaptive learning environments, and seamless virtual collaboration. Beyond the technical marvels, our panel will examine the profound societal impacts of AI in cyber worlds, exploring ethical considerations, security challenges, and ways to ensure accessibility for diverse users. Furthermore, we'll discuss AI's role in fostering creativity, cultural exchange, and inclusive digital ecosystems. Join us as we navigate the future of immersive digital interaction and boundless innovation!

Chair:

Professor Fuhua (Oscar) Lin

Athabasca University, Canada

Fuhua (Oscar) Lin is a Full Professor of School of Computing and Information Systems and Graduate Program Director of Faculty of Science and Technology, of Athabasca University, Canada. Dr Lin's research interests include AI in education, adaptive learning, intelligent systems, online learning, virtual reality, modelling and simulation, and multi-agent systems. He has more than 160 publications. He serves as an Associate Editor or editorial board member for several international journals, e.g., Computers and Education: X-Reality; Online Learning. He served as a General Chair of IEEE International Conference on Cyber Science and Technology Congress both 2020 and 2021, Program Chair of International Conference on Intelligent Tutoring Systems 2024. He serves as a co-General Chair of IEEE SWC 2025.

Panelists:

Professor Georg Borges,

Saarland University, Germany

Georg Borges is a Professor of Civil Law, Legal Informatics, German and International Business Law and Legal Theory and the managing director of the Institute for Legal Informatics at Saarland University, Germany. From 2004 to 2014, he was Professor of Law at Ruhr-University Bochum. Beside this, he was also a Judge at the State Court of Appeals, Hamm Circuit. Since February 2023, he is also a distinguished visiting professor at the University of Johannesburg, Faculty of Law. Since September 2024, he is also a visiting professor at Keio University, Tokyo. As an expert on IT Law and on law and informatics, Prof. Borges authored several books and numerous articles in the field. Prof. Borges is involved in numerous projects in the field of IT and legal informatics. Currently, a focus of his interest is on the legal framework of AI.

Professor Zhong Chen

Beijing University, China.

Zhong Chen, Ph.D., is Professor and Director of Metaverse Technology Institute in School of Computer Sciences at Peking University. Dr. Chen graduated and earned his Ph.D degree from Computer Science and Technology Department at Peking University in 1989, and then joined the faculty of computer science in Peking University. He became full professor in 1995. He was a visiting professor of UCLA from 2001 to 2002. He has been assumed the founding dean position of the School of Software and Microelectronics in Peking University from 2002 to 2010, chairman of CS department from 2011-2015.

Professor Hui Yu

University of Glasgow, UK

Hui Yu is a Professor with the University of Glasgow. He leads the Visual Computing and Social Robot Group at the university. His research interests lie in visual and cognitive computing and machine learning with applications to 4D facial expression reconstruction and tracking for social signal analysis, human-machine interaction, as well as intelligent vehicle, and video analysis. Professor Yu's research work has led to several awards and successful collaboration with worldwide institutions and industries. He is the Associate Vice President of the IEEE Systems, Man, and Cybernetics Society and a Scientific Advisor for high-tech companies in the UK.

Professor Xiaokang Wang

Hainan University, China

Topic: When Tensor Computing Meets Metaverse

Xiaokang Wang is a professor with School of Computer Science and Technology, Hainan University, China. His research interests include Cyber-Physical-Social Systems, Parallel and Distributed Computing, Industrial Internet-of-Things, and Tensor Decomposition. He is the vice chair of CIS and SMC chapters of IEEE Canadian Atlantic Section, and the chair of IEEE CIS Task Force on Cyber-Physical-Social Systems. He serves or served as Program Chair of many IEEE International Conferences such as the 2025 IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2025). He serves as an associate editor/ editorial board member or guest editors for international journals.