Cybersecurity: Issues and Challenges

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Abstract – Internet of Things (IoT) has brought tremendous benefits to economics, environments, society, indeed, every fields and people's daily life. However, it also exposes high risk to malicious attacks. Therefore, Cybersecurity is critically important in today's interconnected world due to protection of data, preservation of privacy, maintain trust, prevention of distruption, protection of infrastructure, economy stability and growth, etc. In essence, cybersecurity is not just a technical issue but a fundamental aspect of modern life and business operations. It requires continuous vigilance, adaptation to new threats, and proactive measures to protect individuals, organizations, and societies from the potential harm of cyber incidents. This talk will briefly present some issues and challenges facing to cybersecurity.

Peng Shi received the PhD degree in Electrical Engineering from the University of Newcastle, Australia. He was awarded the Doctor of Science degree from the University of Glamorgan, UK, and the Doctor of Engineering degree from the University of Adelaide, Australia. He is now a Distinguished Professor at the School of Electrical and Mechanical Engineering, and the Director of Advanced Unmanned Systems Laboratory, at The University of Adelaide, Australia. His research interests include systems and control theory and applications to autonomous and robotic systems, cyber-physical systems, and autonomous and robotic systems. He received the Life-time Achievement Award from the International Engineering and Technology Institute in 2023, the Meritorious Service Award from IEEE Systems, Man and Cybernetics (SMC) Society in 2023, the MA Sargent Medal Award from Engineers Australia in 2022; the Life-time Achiever Leaderboard and Field Leader Recognition from The *AUSTRALIAN Research Review* from 2019-2023, and the Highly Cited Researcher Acknowledgement from Thomson Reuters/Clarivate Analystics 2014-2023. Currently he serves as the Editor-in-Chief of IEEE Transactions on Cybernetics, a Senior Editor of IEEE Access, and an associate editor of Automatica and IEEE Transactions on Artificial Intelligence. His professional services also include as the Vice President of IEEE SMC Society (2021-2022), and IEEE SMC Society Distinguished Lecturer (2022--). He is a Fellow of IEEE, IET, IEAust, CAA, and a Member of the Academy of Europe.