

# Robotics and Artificial Intelligence: Now and Future



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## **Abstract:**

The talk will focus on the development of key technology of intelligent robotics and artificial intelligence. Brief history of AI and robotics development will be covered and then key technical issues and development status of robots around perception, decision-making and execution will be discussed in detail, finally some thoughts on AI technology for robotics including adaptive algorithm, big data in robots and novel computing architecture will be put forward.

## **Biography:**

Dr. Jason GU received the bachelor's degree in Electrical Engineering and Information Science from the University of Science and Technology of China, in 1992, the master's degree in Biomedical Engineering from Shanghai Jiao Tong University China in 1995, and the Ph.D. degree from the University of Alberta, Canada, in 2001.

He is currently a Full Professor of Electrical and Computer Engineering with Dalhousie University, Canada. He is also a Cross-Appointed Professor with the School of Biomedical Engineering for his multidisciplinary research work. He has over 26 years of research and teaching experience and has authored over 350 conference papers and articles. His research areas include robotics, biomedical engineering, rehabilitation engineering, neural networks, and control. He is a fellow of the Engineering Institute of Canada and Canada Academy of Engineering. He has been the Associate Editor of the Journal of Control and Intelligent Systems, IEEE Transactions on Automation Science and Engineering, IEEE Transactions on Mechatronics, IEEE SMC Magazine, the International Journal of Robotics and Automation, Unmanned Systems, the Journal of Engineering and Emerging Technologies, and IEEE Access. Dr. Gu is currently IEEE Canada Past President for 2022-2023.