CV Zhi-Quan (Tom) Luo

Zhi-Quan (Tom) Luo is Vice President (Academic) at The Chinese University of Hong Kong, Shenzhen, and the founding Director of the Shenzhen Research Institute of Big Data. He earned his B.S. in Applied Mathematics from Peking University and a Ph.D. in Operations Research from MIT. Before his current roles, he held tenured faculty positions in both Canada and the United States.

Professor Luo is internationally recognized for his expertise in optimization, big data, signal processing, and wireless communications. His outstanding contributions have been recognized by numerous awards, including the 2010 Farkas Prize, the 2012 Paul Y. Tseng Memorial Lectureship, the 2022 Wang Xuan Applied Mathematics Prize, and the 2023 Shenzhen Science and Technology Progress Award (First Place). He is a Fellow of the IEEE, SIAM, the Royal Society of Canada, and a foreign member of the Chinese Academy of Engineering.

In 2020, Professor Luo introduced a pioneering data-driven approach to network optimization, integrating statistical network models with artificial intelligence. This innovative methodology has been deployed in over 30 countries, optimizing 1.8 million base stations worldwide. His work has improved wireless network performance for a quarter of the global population, significantly reduced operational costs and carbon emissions for telecom operators, and generated substantial economic and social benefits on a global scale.

中文简历:

罗智泉

罗智泉教授是中国工程院外籍院士、加拿大皇家科学院院士、香港中文大学(深圳)副校长、深圳市大数据研究院院长、香港中文大学(深圳)—深圳市大数据研究院—华为未来网络系统优化创新实验室主任。他于1984年获北京大学数学系学士学位,1989年获美国麻省理工学院电子工程与计算机科学系运筹学博士学位。他是SIAM会士和IEEE会士以及IEEE信号处理期刊主编(2012-2014)。

罗智泉教授的学术成果包括无线通信的收发机优化设计、最优鲁棒波束成形设计、动态频谱管理等,相关论文分别获得 2004 年、2009 年、2011 年和 2015 年 IEEE 信号处理学会、2011 年国际通信大会、欧洲信号处理学会以及 2020 年世界华人数学家联盟最佳论文奖;因在优化理论方面的杰出贡献,2010 年被美国运筹和管理科学协会授予 Farkas 奖,2018 年被国际数学优化学会授予 Tseng 纪念奖,2022 年被中国工业与应用数学学会授予第一届王选应用数学奖,以及 2023 年深圳市科技进步奖一等奖。

2020年,挑战网络效能最大化的难题,他开创性地提出了数据驱动的网络优化技术路线和算法框架,成功将数据驱动网络统计模型与人工智能技术深度融合。成果被华为GTS认定为"根技术",目前已成功应用于30多个国家的无线网络,优化超过180万个基站,显著提升了网络性能。该技术不仅惠及全球四分之一人口,还为电信运营商大幅降低了运营成本和碳排放,产生了显著的经济效益和社会效益。