Distinguished Lecturer Visit by Prof. Giancarlo Fortino at IEEE SMCS ACT Chapter, 01-02, October 2024

Prof. Giancarlo Fortino visited The University of New South Wales, Canberra, on October 01st, 2024, where he delivered an IEEE Distinguished Lecture titled "Edge Intelligence for the Next-generation IoT Systems " to the SMCS ACT Chapter in Canberra, Australia, organized by Dr. Huadong Mo and Professor Daoyi Dong.

The IEEE SMC Society's ACT Chapter was established in 2018, led by the Chapter Founding Chair, Prof Daoyi Dong, and received a Best SMCS Chapter Award in 2021. The successful activities continue, and Dr Huadong Mo is now serving as ACT Chapter Chair. The ACT Chapter activities cover UNSW, ANU and other academic and government organizations in ACT. Chapter meetings happen at least once per year, and the DLP visit by Prof Fortino provided an excellent opportunity to have the Chapter members together. It is a piece of great news that Prof Fortino's Distinguished Lecture and visit to the ACT Chapter have attracted two new attendees to join the SMC Society and the petition to establish the first student chapter in Australia - the University of New South Wales - Canberra Student Branch Chapter. Other recent remarkable ACT Chapter activities included a workshop on AI for Energy in December 2024 and monthly online seminars from academics from top universities.

The distinguished lecture by Prof. Giancarlo Fortino, held at Z-21-241 (SL3), UNSW Canberra, attracted over 15 participants. Prof. Fortino, an IEEE Fellow (2022) and Full Professor of Computer Engineering at the University of Calabria (Unical), delivered a talk on the emerging paradigm of Edge Intelligence (EI). He highlighted how EI addresses the limitations of cloud computing—such as latency, autonomy, and cost—in enabling next-generation Internet of Things (IoT) services.

During the seminar, Prof. Fortino provided a systematic analysis of the EI landscape using a tertiary study framework aligned with PRISMA methodology. He outlined key research questions to guide future exploration of the EI paradigm, demonstrating its intersection with IoT and cloud computing. The talk also showcased his research within the Horizon Europe project "MLSysOps" and the PRIN "COMMON-WEARS" project, focusing on the concept of a Digital Twin enabled by EI for Smart City applications.

Furthermore, Prof. Fortino introduced 'EdgeMiningSim', a novel simulation-driven methodology inspired by software engineering principles. This approach facilitates IoT data mining and machine learning, empowering domain experts to derive actionable insights through predictive models in dynamic IoT environments.

Prof. Fortino's lecture stimulated meaningful discussions, providing participants with deep insights into the future of EI and its potential applications. The success of this event reflects the ACT Chapter's commitment to promoting knowledge exchange, with appreciation extended to the SMC Society and the DLP Program, coordinated by Prof.ssa Mariagrazia Dotoli.

Figure 1: Prof. Giancarlo Fortino presents the IEEE SMS Distinguished Lecture on 01st, October 2024, at the University of New South Wales, Canberra.

Figure 2: On-site attendees at UNSW after the IEEE SMC Society Distinguished Lecture.