Tokyo Bulletin No.159

[October. 11, 2024]

Result of the additional candidate(s) for officers and executive committee members of IEEE Tokyo Section Office for Year 2025/2026

There was no nomination for the additional candidate(s) which we announced on Tokyo Bulletin No.157 issued on July 31, 2024. We plan to resolve the election of officers and executive committee members which announced on the Tokyo Bulletin No.157 on the next Annual General Assembly. Therefore, they will serve as the post of officers and executive committee members for two years from January 1st, 2025.

Lecture Meeting hosted by Tokyo Section LMAG (co-hosted by TPC)

The lecture was organized by LMAG-Tokyo and co-sponsored by Tokyo Section TPC, with support from the Institute of Electronics, Information and Communication Engineers. It was held on August 21, 2024 (Wednesday) at 15:00 via Zoom Webinar. The speaker was Dr. Takemasa Miyoshi (Team Leader and Chief Scientist, RIKEN), and the lecture title was " Big Data Assimilation Revolutionizing Numerical Weather Prediction Using Fugaku." The event had a total of 178 participants (including 109 IEEE members).

Data assimilation is crucial for synchronizing simulations with the real world for prediction and control. Although it has advanced significantly in weather forecasting, its applications are expanding into various fields as a method for realizing digital twins. At RIKEN, new-generation technologies such as the supercomputers "K" and "Fugaku," phased array weather radar, and satellite data are combined to pioneer innovations in predicting guerrilla rainstorms, typhoons, and heavy rainfall. During the 2021 Tokyo Olympics and Paralympics, a real-time demonstration experiment of the world's leading guerrilla rainstorm prediction, updated every 30 seconds, was successfully achieved using the power of the "Fugaku" supercomputer. Furthermore, prediction and control are closely related, with data assimilation being based on optimal control methods. In the context of advancements in predictability research and improved weather forecast accuracy, efforts towards weather control have also begun, with the speaker taking a leading role in the Moonshot Goal 8 project led by the Cabinet Office. Looking ahead, a new perspective known as "predictive science," which aims to tackle challenges beyond weather forecasting, is emerging.

The lecture on weather prediction and control was very engaging. After the lecture, there were many questions, making the event lively and successful.

Dr. Miyoshi giving his talk (Screenshot)

Big Data Assimilation (Screenshot)

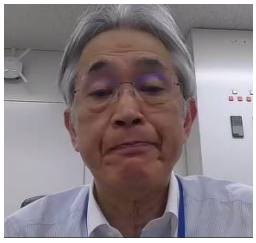
(Reported by LMAG-Tokyo, Hideki Hayashi)

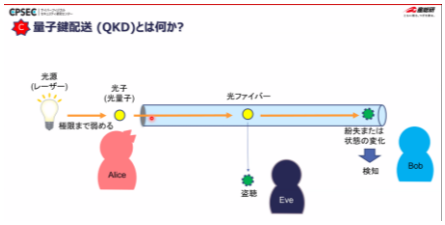
The 5th Lecture Meeting of Tokyo Section in 2024

On Tuesday, August 2nd, from 15:00 to 16:30, the Tokyo Section Technical Program Committee (TPC) hosted the 2024 5th Tokyo Section Lecture Meeting with the Zoom Webinar virtual meeting system (co-sponsored by the IEEE Tokyo Section LMAG (Life Members Affinity Group), co-sponsored by the Institute of Electronics, Information and Communication Engineers). Approximately 110 people participated.

Dr. Shinichi Kawamura who received IEEE Fellow in 2023, Deputy Director of the Cyber Physical Security Research Center at the National Institute of Advanced Industrial Science and Technology, was invited to give a lecture entitled “Cost-effective and secure cryptography”. He explained various security technologies that have contributed to the realization of DVD recorders, IC cards, and quantum cryptography, with a variety of examples. Additionally, he introduced the IEEE Fellow program based on his own award experience.

This time we held the lecture meeting with an online using Zoom Webinar. We will hold virtual online meetings and hybrid meetings to facilitate communication.





(Reported by Technical Program Committee Secretary, Koji Akita)