

This issue includes reports on the JC-IPC lecture, the 6th LMAG-Tokyo Evening Salon, the 5th Tokyo Section lectures, the Tokyo Section SIGHT Workshop, the 7th Tokyo Section lecture, and the 2023 Regional LMAG Achievement Award-winning report.

1. JC-IPC hosted Lecture (co-hosted by LMAG)

The IEEE AESS Distinguished Lecturer hosted by JC-IPC and co-sponsored by Tokyo branch LMAG, TPC, and AOC (Association of Old Crows Society of Electronic Warfare Japan Branch) was held on April 19, 2023 (Wednesday) at Kikai Shinko Kaikan. Ta. 33 face-to-face and 61 online participants participated. The speaker was Dr. Karen Haigh, and the title of the lecture was "Cognitive RF Systems: Using AI to Solve Complex Problems."

The talk provided a broad overview of how AI is used in complex radio frequency systems. AI Situation Assessment, Decision Making, and Machine Learning showed where AI techniques could work in RF systems and explained that cognitive radio, cognitive radar, and cognitive electronic warfare are the same concepts. She also explained how to handle real-time in-mission learning and how to evaluate a system that learns during a mission.

After the lecture, an exchange meeting was held at the venue, and many of the face-to-face participants participated and interacted.



Fig.1 Dr. Karen Haigh giving a talk (Zoom screenshot)

2. The 6th LMAG-Tokyo Evening Salon

The 6th Evening Salon was held on 25th May 2023 in a hybrid format (on-site and webinar), organized by the IEEE Tokyo section Life Member Affinity Group

(LMAG), and co-sponsored by Tokyo section TPC, YP, and Tokyo/Shin-etsu joint section WIE at the Kikaishinkoukaikan meeting room in Tokyo, Japan. A total of 57 persons including LM 18 persons joined. This was a salon-style exchange meeting to exchange opinions and interact with members, specializing in a specific theme or region.

Professor Emeritus Iwao Sasase, Keio University (Japan Sommelier Association Certified Wine Expert) gave the lecture, titled An Introduction to How to Enjoy "Wine"~From the Aspects of History, Science, and Culture~

The lecture included mainly the following three contents: Let's Know "Wine" from History, Science and Culture, How to Choose and taste wine, and Champagne Tours. Furthermore, the lecturer introduced his own thoughts on the comparison and similarity between wine dignity and human - dignity, and human networks by "communication" through wine. In the Q&A session, there were many questions about the benefits of wine and how to drink it. Both the lecture and the Q&A session exceeded the scheduled time, and lively discussions were held among the participants.

After the lecture, it was an opportunity to deepen exchanges among the participants, including the younger generation who participated and those who participated in IEEE events for the first time.



Fig.2 Prof. Iwao Sasase giving a lecture

3. Tokyo Section TPC hosted Lecture (co-hosted by LMAG)

The 5th Tokyo Section Lecture was held online at KikaiShinko Kaikan (local) on Monday, June 26, 2023, sponsored by IEEE Tokyo Section TPC, co-sponsored by LMAG Tokyo, and sponsored by the Institute of Electronics, Information and Communication Engineers. The lecturer was Dr. Shaoying Liu (Professor at Hiroshima University Graduate School), and the title of his lecture was "Formal Engineering Methods: Bridging Formal Methods and Software Engineering." A total of 46 people participated, 8 persons on-site and 38 persons online.

In the lecture, he presented Formal Engineering Methods (FEM), and how to effectively integrate "formal methods (FM)", which were techniques for specification description, development, and verification of software and hardware systems based on mathematics, into conventional software. FEM research history and the latest research were introduced, and it was explained that software productivity and high reliability can be expected. Using a typical FEM, "Structured Object Oriented Formal Language (SOFL)", he explained a three-step formal specification approach, program inspection based on specifications, and rigorous and practical system modeling including testing, and verification techniques. Further, he explained that if FM is science, FEM has a technology role, and SOFL is suitable for education and practical use. There was also a lively discussion during the Q&A session after the lecture.



Fig.3 Prof. Shaoying Liu giving a lecture

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

The lecture meeting was held online from 15:00~16:30 on June 27, 2023, using Zoom Webinar, hosted by the LMAG and co-hosted by the TPC both of IEEE Tokyo Section. The lecturer was Dr. Shiho Moriai, Senior Executive Director, Director General, Cybersecurity Research Institute, National Institute of Information and Communications Technology (NICT) and the title was "Cybersecurity Trends and Cutting-Edge Measure - NICT's Efforts to Strengthen

Cybersecurity in Japan". She presented NICT's wide activity and initiatives comprehensively with actual numerical analysis, covering basic research and practical technology development with social implementations for cybersecurity.

Dr. Moriai first reported that cyberattack has become a big business by showing the increasing number of damages caused by Ransomware attacks. Based on strong social demands, NICT has developed useful large-scale systems for observing cyberattack and issuing alerts. She also introduced two initiatives to strengthen cybersecurity in Japan, 1) human resource development and 2) an advanced infrastructure for industry-academia-government collaboration. For human resource development, it is important to foster both practical security operators and researchers for innovative cybersecurity research. The number of participants was 137 (including 82 IEEE members).



Fig.4 Dr. Shiho Moriai giving a talk online (Zoom screenshot)

5. The First Toko Section SIGHT Workshop (co-sponsored by LMAG-Tokyo)

Organized by IEEE SIGHT Tokyo, Tokyo LMAG, Tokyo TPC, Tokyo YP, Tokyo SAC, Tokyo EA, Japan Council EATokyo/Shin-etsu Joint Section WIE, the co-sponsored workshop "The IEEE Humanitarian Activities Workshop in Japan 2023" was held on Saturday, August 5, 2023 at 13:30-16:30 at Yokohama Hatoba-Kaikan and online hybrid. There were 72 participants (53 IEEE members, 8 LMAG members, and 35 online participants), including LMAG-Tokyo Chair N. Ohta, Vice Chair H. Hayashi, and Secretary T. Sugie.

The title of the workshop is "What We Can Do with Our Own Hands for a Healthy and green earth and All the living things that live there." There were three lectures on themes related to Humanitarians in a broad sense: (1) Solar sharing to create the future of the region ~Efforts of Sagamiko Berry Garden~ (Ryuji Koide), (2) FEEL the EARTH (Ai Ogasawara), and (3) University with 100% natural energy (Takako Hashimoto). Lively discussions took place.

A reception was also held to deepen the friendship

among the members of the many groups in the IEEE Tokyo Section



Fig.5 Photos of the three speakers, and the organizers and co-sponsor representatives

6. Tokyo Section TPC hosted Lecture (co-sponsored by LMAG-Tokyo)

This lecture was hosted by IEEE Tokyo Section TPC and co-sponsored by Tokyo LMAG and was held in an online conference format by Zoom Webinar from 3:30 p.m. on Tuesday, August 29th. The lecturer was Dr. Eiichi Yoshida (Professor, Department of Functional Design Engineering, Faculty of Advanced Engineering, Tokyo University of Science), and the title was "Making Robots Smarter by Learning Humans: Understanding, Reproducing and Synthesizing Anthropomorphic Motions". There were 85 participants (including 56 IEEE members) and 77 online participants.



Fig.6 Prof Eiichi Yoshida giving a lecture

Positioning a digital human model and a humanoid as a "humanoid system," the lecturers have been working with the goal of understanding the mechanism through human movement analysis and reproducing it with a humanoid to bring its capabilities closer to those of humans. The focus was on research.

Although the research is still in the development stage and there is still a long way to go to reach the goal, the status, and future challenges were also introduced in this lecture.

7. LMAG-Tokyo Wins "Regional LMAG Achievement Award 2023"

LMAG-Tokyo won the Regional Life Members Affinity Group Achievement Award 2023. Dr. Imai, past chair of LMAG-Tokyo received the certificate on July 10, 2023. The award was given to recognize substantive initiatives, projects, or achievements that took place in the LMAG in 2022. The citation was "contribution to increase intelligence, engagement, and friendship among IEEE members by rich experience of IEEE Life Members and Hybrid format participation for COVID-19 countermeasures."



Fig.7 Certificate of award received

8. Future Events

LMAG-Tokyo is planning to hold the following events. Details will be announced at a later date.

- October 4 (Wednesday): LMAG Technical tour to "Japan Agency for Marine-Earth Science and Technology" (JAMSTEC)

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