

## IEEE Estonia Section

**Dmitri Vinnikov, Chair**

### Section Vitality

Elections: Last elections of the IEEE Estonia Section Board have been conducted in Nov-Dec 2020. Starting from January, 2021 the Section Board is represented by the following volunteers:

- Dmitri Vinnikov, Chair
- Vladimir Kuts, Vice-Chair
- Roya Ahmadi, Secretary
- Urmet Jänes, Treasurer

In the first half of 2021 the ExCom meetings have been organized bi-weekly, starting from September they are organized monthly. Meetings are conducted online and attended by most of the board members. Twice a year (June and December) the extended ExCom meetings are organized in person for better interaction between the members. The largest ExCom meeting is hosted during the traditional IEEE Estonia Section August Seminar. In 2021 for meeting both the recruitment and retention goals the Estonia Section was recognized by the golden medal.



### Students

Student Branches of the IEEE Estonia Section:

1. Tallinn University of Technology - 45 student & graduate student members, Chair: Saleh Alsaleh (elected in 2021), Counselor: Omar Abdelghafour (elected in 2021)
2. University of Tartu - 15 student & graduate student members, Chair: Junming Ke (elected in 2021)
3. Tallinn University of Technology Industrial Electronics Society Student Chapter, 7 graduate student members, Chair: Vadim Sidorov (elected in January 2022).

IEEE Estonia Section actively supports all students and YP activities, both technically and financially. Tallinn University of Technology SB demonstrated an outstanding activity and helped the section in the following actions:

1. Promotion of the section and chapters activities to students through social media channels and the IEEE.EE Website.
2. Providing technical assistance to the chapter members for using the IEEE Section webpage.
3. Help with re-activation of the Tartu SB branch by organizing elections for a new Tartu SB chair.
4. Seeking of official registration possibility as a student organization at Tallinn University of Technology.

### Affinity Groups

1. **The IEEE Estonia Section Young Professionals AG** – has organized 3 seminars from the series “IEEE Connecting Experts” on May 12, 2021 (“The Role of Power Electronics in Energy Transition”), June 18, 2021 (“Automated Fault Detection in HVAC Systems with Machine Learning and Rule-based Methods”) and November 4, 2021 (“Towards Intelligent Immersive Virtual Environments”). Moreover, two workshops have been organized. All events have been organized online and attracted a solid number of participants.
2. **The Tallinn University of Technology Women in Engineering Student Branch AG** – recently under formation. This AG is currently led by Karolina Kudelina and Olga Vovk, who have been elected as a Chair and Vice-Chair, correspondingly, at the beginning of 2021. This AG hosted 2 online webinars in 2021 and scheduling at least 3 new events for 2022.

### Chapters

1. Education [E25 (CH08649)], Chair: Tiia Rütmann; Vice-Chair: Aleksei Tepljakov. 9 members in Aug 2021, 13 (Aug 2020)
2. Computer/Communications/Information Theory [C16/COM19/IT12 (CH08494)], Chair: Alar Kuusik, 42 members in Aug 2021, 46 (Aug 2020).
3. Instrumentation and Measurement/Electron Devices/Engineering in Medicine and Biology [IM09/ED15/EMB18 (CH08500)], Chair: Paul Annus (elected in 2021), 12 members in Aug 2021, 19 (Aug 2020).
4. Signal Processing/Circuits and Systems/Solid-State Circuits [SP01/CAS04/SSC37 (CH08269)], Chair: Gert Tamberg (elected in 2021), 18 members in Aug 2021, 15 (Aug 2020).

5. Industrial Electronics / Power Electronics / Industry Applications / Power & Energy Joint Societies Chapter [PE31/IA34/PEL35/IE13], Chair: Andrii Chub, Vice-Chair: Indrek Roasto (both elected in 2021), 38 members in Aug 2021, 20 (Aug 2020).
6. Robotics and Automation Society Chapter [*under formation*], Leader: Vladimir Kuts, 15 members in Aug 2021.

### Industry

After some pause caused by Covid situation the relationships with industry are now being recovered. Still, members in industry do not feel they get enough in return of their membership fee compared to members at the universities who enjoy the full benefits of IEEEExplore and reduced conference participation fees. To further boost this activity, we will implement the following measures in 2022:

- Election of the Industry Ambassador among people outside academy to improve the contacts with industry, dissemination of information about DL visits etc.
- During our section-wide summer seminar in August 2022 we will invite representatives of the local (IEEE areas related) industry to discuss their problems, challenges etc.

### Activities since the last report

- Starting from 2021 the IEEE Estonia Section pays special attention to organization of monthly webinars and online meetings with experts in different disciplines. These events are hosted by different chapters in a sequential manner and became especially popular among the students and YPs.
- IEEE Tallinn University of Technology SB in cooperation with IEEE Section organized students' participation at the IEEEExtreme 15.0. We had 5 teams from TalTech with a total of 11 participants, and 4 teams from Tartu with a total of 10 participants, bringing the total participants from Estonian section to 21.
- To increase student engagement in the IEEE activities IEEE Estonia section and IEEE TalTech SB supported the TalTech IT faculty student council event "IT-teaduskonna rebaste ristimine".

### Planned activities

- Chapter Chair Elections for the Education and joint Computer/Communications/Information Theory (C/COM/IT) Chapters
- The Section will be focusing on increasing the members' activity, which has been rather low. To this end, we are planning to experiment with several kinds of social events to have members interact more closely.
- Technical co-sponsorship of the 18th Biennial Conference on Electronics and Embedded Systems (BEC'2022), which will be held in Tallinn, Estonia on October 4-6, 2022.
- Technical co-sponsorship of the 14th International Conference on Cyber Conflict (CyCon'2022) which will be held in Tallinn, Estonia from 31 May through 3 June 2022.
- In August 2022 we'll organize our annual two-day seminar, in which each society will have a time slot with selected technical talks.

