

Industrial Activities Board Grows to Meet New Challenges and Future Opportunities

By Andra Keay 

More robotics companies have been formed in the past 10 years than in the rest of the history of the field (Figure 1). The strong industry participation at the 2022 IEEE International Conference on Robotics and Automation, with 96 industry exhibitors and sponsors, is another indicator of this rapid growth and a credit to the Organizing Committee and the industry and exhibits chairs, Jim Ostrowski (Figure 2) of Blue River Technologies, and Zeynep Temel of Carnegie Mellon University.

We are at the leading edge of a wave of innovation that is going to ripple through the next generation of industry and impact policy and governance around the world. This was showcased in the six successful industry forums organized by Henrik Christensen, University of California, San Diego. In addition to rapid growth in commercial investment in robotics, there is rapid growth in robotics standards (Figure 3). The IEEE Robotics and Automation Society (RAS) Industrial Activities Board (IAB) has a great opportunity to be relevant beyond academic bounds. The IAB is changing to meet these challenges, and we would like you to join us. In 2022 and 2023, we are adding significant new projects as well as continuing established programs.

In order to accomplish the new IAB projects, we need to expand the

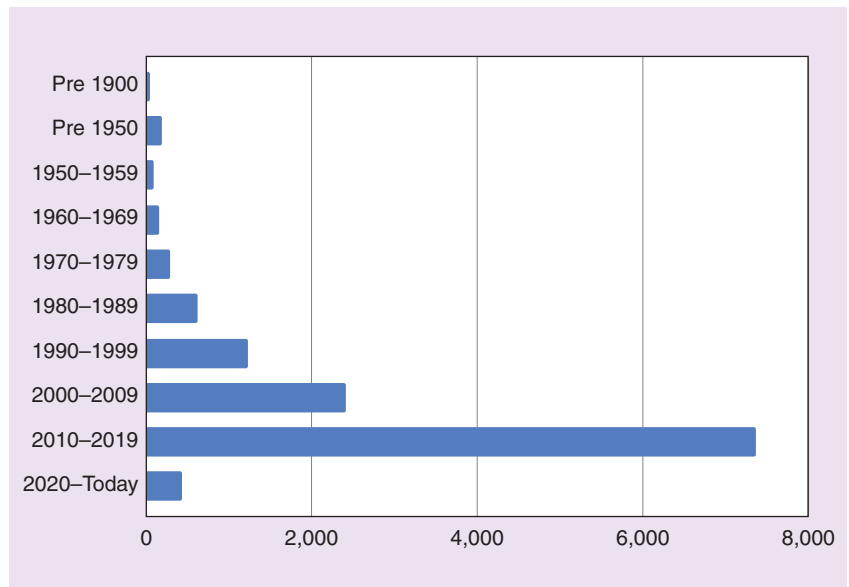


Figure 1. The establishment dates of robotics companies shows the rapid recent growth of the industry. (Source: Crunchbase.)



Figure 2. From left: Andra Keay, IAB vice-president and Jim Ostrowski, IEEE International Conference on Robotics and Automation Industry/Exhibits chair with the inaugural Tech Huddle program.

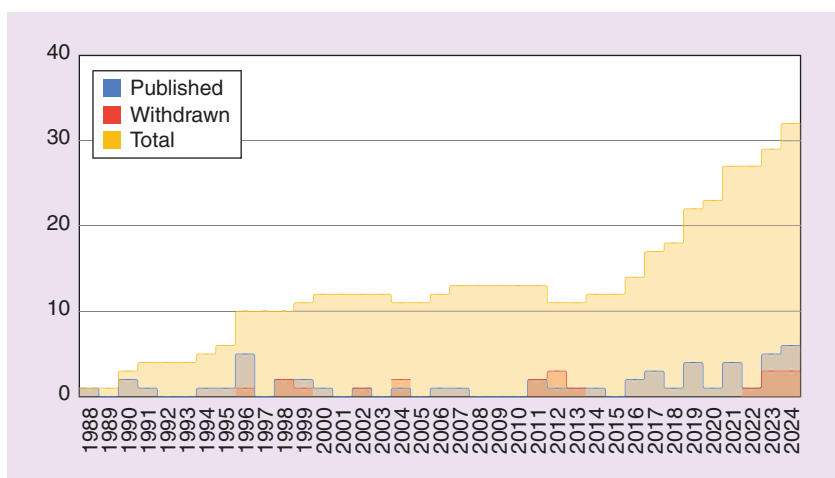


Figure 3. Changes in the number of ISO robotics standards over time.

community and are looking for more people to join us, particularly those with experience in industry and roles in trade associations.

IAB Projects in 2022 and 2023

IAB activities for 2022 and 2023 include the following:

- *Standards Committee*: coordinating new standards study and work groups while liaising with other standards bodies and supporting existing standards development
- *industry forums and entrepreneurship*: workshops at RAS flagship conferences

- *robotics entrepreneurship education materials*: up-to-date, robotics-centric best practices
- *robotics industry report*: case studies of commercial deployments of innovative robotics.

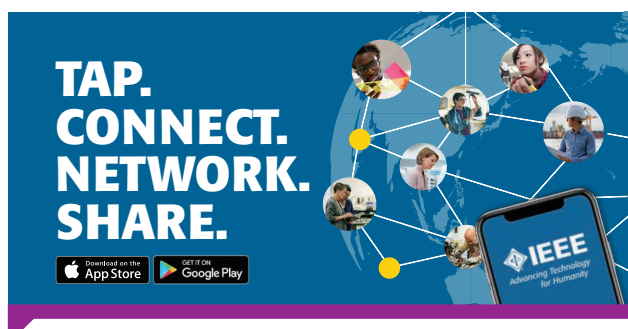
The IAB now has three associate vice presidents, with a fourth position to help coordinate the industry forums that is still vacant, as follows:

- 1) Dr. Craig Schlenoff, National Institute of Standards and Technology, who oversees the IEEE Robotics Standards Committee
- 2) Hallie Siegel, associate director of strategy, University of Toronto Robotics Institute, and cochair, Canadian Robotics Council, who oversees the robotics industry report and the Data and Roadmaps Committee
- 3) Dr. Tamás Haidegger, director, University Innovation and Research Center, Óbuda University, who will oversee the Entrepreneurship Committee.

The IAB has new committees for eight robotics industry-facing clusters: advanced manufacturing, agricultural technology, construction, health and medical, interaction technologies, machine intelligence, mobility and logistics, and space and extreme environments. While the new IAB committees overlap with the new TAB Technical Committee Clusters, we are focused on where a company would go to market, rather than on the underpinning technology.

In the future, if you are organizing a robotics conference, the IAB has compiled suggestions for forums and workshops that it can coordinate for you. In early 2023, when our entrepreneurship education materials are prepared, we will be able to provide robotics start-up workshops at conferences and online.

Finally, we are looking for industry case study writers for our inaugural robotics industry report. Contact us at ras@ieee.org, or submit case studies directly to the Canadian Robotics Council, at https://docs.google.com/forms/d/1u8fZNo48zRkpY6S-EXTgM1HBnf47nL0h-f4_Y-51HhU/edit.



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