

IEEE Information Theory Society Newsletter



Vol. 68, No. 4, December 2018

EDITOR: Salim El Rouayheb

ISSN 1059-2362

President's Column

Elza Erkip

My President's columns in the Newsletter started on a high note with my first column in the March issue, talking about how I fell under the spell of information theory. They end on a more somber, yet still optimistic note with this column.

This was not the easiest year for the Information Theory Society. A sexual harassment case involving two society members, a professor and a student, became public late last year, and the society spent most of this year soul searching. We talked about harassment, bullying, discrimination and retaliation. The Board of Governors (BoG) reaffirmed the IEEE Code of Conduct, IEEE Code of Ethics, and IEEE Non-discrimination Policy, and approved a statement strongly condemning sexual harassment. We passed a Conference Code of Conduct to ensure an inclusive, welcoming, and safe environment for everyone at all of our events (see page 12). We talked about the recent U.S. National Academies of Sciences, Engineering and Medicine (NASEM) report on sexual harassment, the prevalence of gender harassment and the importance of institutional culture and climate. Our society's experience with sexual harassment and the NASEM report also prompted the IEEE to reexamine its policies and reporting mechanisms to deal with sexual harassment and related retaliation. At BoG meetings, during a special session at ISIT, during breaks at conferences, in social media and personal webpages, we discussed whether we had the right approach and whether we did enough. Some of my reflections from 2018, which I shared with the BoG during its October meeting, are summarized in the meeting minutes on page 17, and in my President's Report at https://www.itsoc.org/people/bog/past-meetings/bog-meeting-chicago-2018/Report_Oct181.pdf/view.

Part of the difficulty of dealing with the conflict was that we are a small, close-knit society. Going forward, an important question for all of us is how we can maintain our strong sense of community, yet welcome a diverse group of members, a



diverse and fresh set of ideas. While information theory has an illustrious past, with many accomplished researchers and breakthrough discoveries, the only way we can continue to thrive is if we embrace the young and the new.

I am happy to report two important achievements from this year that will help increase the diversity of our membership and technical accomplishments. The first one is the newly formed Information Theory Society Diversity and Inclusion Committee, which started as an ad-hoc one in February 2018. This committee will be responsible for ensuring that policies, procedures, and practices are conducive to creating and maintaining a diverse and inclusive environment that best serves all Information Theory Society members. It plans to develop strategies to increase engagement and representation of under-represented groups in the society. Other goals of the committee include ensuring inclusive recognition of the member contributions and achievements within the society and the greater IEEE, continually identifying processes within the society that are barriers to representation and inclusion, and suggesting improvements. Finally, the committee will evaluate the above in an ongoing manner to ensure the needs of under-represented groups are being met. It plans to communicate with the society membership through articles in the Newsletter and is working on its first event which will take place during ISIT 2019.

The second important achievement is establishing a new journal, IEEE Journal on Selected Areas in Information Theory (JSAIT). The final and second phase proposal of JSAIT was approved by the IEEE during its November 2018 meeting, and the Steering Committee, chaired by Jeff Andrews, is moving fast to publish the first issue in early 2020. An open call for the Editor-in-Chief (EiC) was circulated in Fall 2018, and I am happy to report that upon the recommendation of

(continued on page 11)

President's Column *(continued from page 1)*

the Steering Committee and approval by the BoG, Andrea Goldsmith will be the inaugural EiC of JSAIT.

JSAIT will be a multi-disciplinary journal consisting of special issues that focus on the intersections of information theory with fields such as machine learning, statistics, cryptography, biology, neuroscience, theoretical computer science, economics and physics. These fields and many others rely on the fundamentals of information theory, including concepts such as entropy, mutual information, divergence, capacity, compression, coding and decoding. In addition, several of these fields are looking to develop rigorous mathematical models, analysis, and fundamental performance limits, which can be rooted in information theory. There will also be special issues on important topics firmly within information theory. An important component of the new journal

will be tutorial papers that facilitate our members exploring new fields, and illuminate how information theoretic tools can solve open problems in other disciplines. As such, JSAIT will lead to cross-pollination between information theory and other fields, help incubate new topics in the society and eventually move them into the mainstream. Having a journal focusing on inter-disciplinary topics will allow the Information Theory Society to diversify its technical tools, adapt and respond to new trends and expand the horizon and impact of our field.

I step down as the President of the Society, but I will continue to serve in my capacity as the Junior Past President in 2019, and Senior Past President in 2020. I am also the chair of the Diversity and Inclusion Committee in 2019. I am happy to hear from all of you; please feel free to contact me at elza@nyu.edu.