



Engaging Undergraduate Students

Twenty years ago I joined the IEEE and the IEEE Signal Processing Society (SPS) as a Student Member. I still remember my excitement when I received my copy of *IEEE Signal Processing Magazine* (*SPM*) in the mail, which was a big deal for an undergraduate student! I probably only had the background to understand part of the content in the magazine, but still, it was valuable exposure to this exciting field.

Jack Deller was the editor-in-chief of the very first issue of *SPM* I received. It was only last year that I had the opportunity to meet him in person, but his leadership effort paved a foundation for the critical growth of *SPM* in 1991–1997. *SPM* was attractive to many young people, including me, to pursue signal processing.

My graduate study years coincided mostly with Aggelos Katsaggelos' term as editor-in-chief (1997–2002). *SPM* has served as an important reference for graduate students like me. I remember reading the wonderful series of overviews reflecting the past, present, and future of a number of technical areas in celebration of the 50th anniversary of SPS. Under the transformative leadership of K.J. Ray Liu (2003–2005), *SPM* reformed its operation with openness and diversity, expanded its content coverage, modernized its design, and topped the citation impact ranking. Since then, I was fortunate to have opportunities to become a part of the *SPM* team and work closely with three recent editors-in-chief, Shih-Fu Chang (2006–2008), Li Deng (2009–2011), and Abdelhak Zoubir (2012–2014). Through their collective efforts, these colleagues before me have brought about a high reputation for the magazine.

Given the depth and breadth of *SPM* articles, it is not surprising that this magazine contributes to the technical growth and enrichment of graduate students and researchers. Still, I can't help but recalling where I first started reading the magazine—as an undergraduate. What can *SPM* do to serve and engage undergraduate students, the future generation of our Society? Here are a few highlights.

This year, we engaged in active discussions with the magazine team and many readers on how to make articles accessible, particularly for students and practitioners. We reached a consensus to uphold *SPM*'s tradition in keeping the number of mathematical equations to the minimum amount necessary; combined with other practices on presentation styles, the goal is to make articles appealing to the majority of our readership. It's easier said than done, and this may take some time for authors to work on their articles. We appreciate their cooperation.

We have also been soliciting articles and special issues on timely topics that can draw readers' attention and stimulate their interests. Signal processing for computational photography and smart vehicles are two such examples that students and other readers can relate to their everyday lives. We look forward to sharing these with you in the coming year.

In parallel, we are bringing in-depth coverage of student activities. The July, September, and November 2015 issues of the magazine have featured a series of articles on the SP Cup competition, the Society's new initiative to engage undergraduate students. Special thanks to the past and current Student Service Directors Kenneth Lam and Patrizio Campisi, respectively, and the competition organizers, Carlos Sorzano and Zhilin Zhang, for their informative articles about the first two SP Cup competi-

tions. The SP Cup is now open for the third edition. You can find more information in the "SP Education" column on page 113 in this issue.

We have also opened up the prestigious platform of the magazine to the students' voices and thoughts so that the magazine is not just a passive one-way communication to these burgeoning minds. For the first time, articles in the magazine included reflections in the students' own words as they participated in (and won) the SP Cup competition. Invitations have also been extended to the broad community to share their thoughts about career perspectives and signal processing in everyday life. In addition, we have been working with a group of volunteers to gather and compile contributions from undergraduate students and educators on exciting undergraduate design projects related to signal and information processing. Stay tuned for this content, and please encourage undergraduate students to contribute by answering the call for contributions that are open.

Beyond pursuing cutting-edge research, many undergraduate and graduate students with signal processing training usually join industry workforces. Students need to stay current, track the technical trends, gather practical tips and know-how, and build and extend their professional network. We are working on shaping timely, accessible, and informative content to meet their needs. It is a privilege for *SPM* to welcome undergraduates at the beginning of their careers and stay by their sides to offer them a helping hand. Please do not hesitate to give us feedback on how we are doing and suggestions on what we can do to serve you better.