IEEE Information Theory Society Board of Governors meeting minutes

Catamaran Resort, San Diego, CA, 02.09.2014, 1:15-4:55 PM Edmund Yeh and Tracey Ho

Present:

Present: Abbas El Gamal, Je Andrews, Gerhard Kramer, Andrew Barron, Aylin Yener, Alon Orlitsky, Paul Siegel, Ruediger Urbanke, Matthieu Bloch, Nick Laneman, Mike Honig, Muriel Medard, Tara Javidi, Ram Zamir, Alex Vardy, Sid Jaggi, Emanuele Viterbo, Urbashi Mitra, Michelle E ros, Joerg Kliewer, Tracey Ho, Vijay Kumar, Ashish Khisti, Sergio Verdu.

The meeting was called to order at 1:15 PM by the Information Theory Society (ITSoc) President, Abbas El Gamal, who welcomed the Board of Governors (BoG).

1. Abbas presented the President's Report. Abbas welcomed the new BoG members (Andrew Barron, Stephan ten Brink, Tracey Ho, Nick Laneman, Alex Vardy, Emanuele Viterbo) and the new second VP (Alon Orlitsky). Abbas o ered thanks to Gerhard Kramer for his service as President, Giuseppe Caire for his service as Senior Past President, Helmut Belcskei for stepping in as interim Editor-in-Chief (EiC), Frank Kschischang for agreeing to become our next EiC, and Bruce Hajek for acting as interim conference committee chair.

Abbas congratulated IT members who recently received major awards: David Donoho (Shaw Prize), Arogyaswami Paulraj (Marconi Prize), Dariush Divasalar (IEEE Alexander Graham Bell Medal), Thomas Richardson and Rudiger Urbanke (IEEE Hamming Medal), John Proakis (IEEE James Mulligan Education Medal), Tamar Basar (IEEE Control Systems Award), John Cio (IEEE Kirchmayer Graduate Teaching Award), Balaji Prabhakar (IEEE Innovations in Societal Infrastructure Award). He also congratulated the IT members who recently became IEEE Fellows: Randall Berry, Shuguang Cui, Guang Gong, Vivek Goyal, Martin Haenggi, Peter Hoeher, Syed Jafar, J. Nicholas Laneman, Mingyan Liu, Angel Lozano, Balaji Rajan, Ashutosh Sabharwal, Philip Schniter, Patrick Thiran, Wade Trappe, Wei Yu.

Abbas then outlined the main work items for the BoG for 2014. These include exploring new strategic directions (as recently examined by the ad hoc committee chaired by Je Andrews), managing the size of the Transactions (including considering page charges, page limits, and online supplements, and forming a more robust editorial board), managing declining membership (including instituting di erentiated fees for conferences, workshops, and schools), and improving visibility into Society nances. Abbas showed statistics showing the continued climb in the Transactions page count and the continued gradual decline in Society membership. The latter contrasts with the recent increase in the membership count of the IEEE Communications, Control Systems, and Signal Processing societies.

2. Aylin Yener presented the Treasurer's Report. Aylin started with the 2013 budget. The 2013 budget as nalized in November 2012 was predicting a \$159k surplus. Given the very large surplus from 2012, we had about \$100k that we could spend on initiatives with the 50% rule. Three initiatives were approved totaling \$62k. This would have yielded about \$100k in surplus. However, due to reduced revenue forecasts in October, and a transaction page adjustment from 8000 to 8465 pages, the budget surplus for 2013 is now much closer to 0.

Aylin next reviewed initiatives for 2013. It was noted that initiatives requiring less than \$50k does not require IEEE approval. Three initiatives (Student Committee, WITHITS, and Online Committee) were approved and implemented successfully. Student Committee expenses involved \$8020 (main budget)+

\$1932 (Special initiative budget), giving a total amount roughly equal to the yearly budget. The initiative	<u>;</u>

Recently, four ENC nominations were awarded. The IEEE Hamming Medal was awarded to Tom Richardson and Ruediger Urbanke. The IEEE Bell Medal was awarded to Dariush Divsalar. The IEEE Mulligan Medal was awarded to John Proakis. The Dobrushin award was given to Imre Csiszar.

In the discussion which followed, a French award was mentioned as another possible external award for consideration. Alon asked BoG members who know of other relevant awards to inform the committee.

5. Matthieu Bloch presented the Online Committee report. Matthieu reviewed the progress of the web initiative approved at the ITW Seville BoG meeting in September 2013. The main objective of the initiative has been to develop enhancements to the website that would enable us to integrate videos and media resources into the website, and in particular to give a more prominent place and more visibility to the lectures recorded during the schools of Information Theory. In addition, the initiative will provide simple means of sharing ITSoc resources on social media (Facebook, Google+, etc.). 80% of the development (infrastructure upgrade and early enhancements) was completed before the end of 2013. In December 2013, IEEE indicated that we had to submit to an IEEE Project Request (IPR) procedure. The IEEE review process has been particularly slow. On a positive note, IEEE has approved the budget and we will be able to pay SixFeetUp for past development and move forward with the last remaining features. As far as the web initiative is concerned, we should be able to proceed as originally planned, but further interactions with IEEE on this are to be expected. The Online Committee will report on this in a timely manner once IEEE provides feedback. It is noted that the Society President and Treasurer will be updated on developments.

on December 16, 2013, taking over from interim EiC Helmut Belcskei. The Executive Editorial Board (EEB) comprising of Dave Forney, Prakash Narayan, Vince Poor, and Shlomo Shamai, has agreed to continue until mid-2014.

A new slate of Associate Editors was appointed in January 2014. These include Salman Avestimehr Osvaldo Simeone, Stephan ten Brink (Communications), Jun Chen, Sae-Young Chung, Tie Liu, Chandra Nair, Haim Permuter, Sandeep Pradhan (Shannon Theory). There are number of other AEs stepping down in February 2014, and a new slate of candidate AEs will be proposed. The Editorial Board currently includes 40 AEs. Papers arrive at a rate of roughly 1200/year, giving an average load of 30 papers per year.

By mid-December, 2013, all papers formerly hosted on Pareja had been transferred to ScholarOne. This was accomplished by much hard work from Helmut, Lisa Jess at IEEE, but most particularly, Michael Lerjen at ETH Zurich. Frank suggested that the President send Michael a letter and an o cial IEEE Certi cate of Appreciation in recognition of his valiant e orts. Abbas agreed.

The Transactions moved to moderate editing in December 2013. Under moderate editing, IEEE performs all the usual editing functions except editing text for grammar, punctuation, spelling or style. Moderate editing reduces IEEE page charges from \$57/page to \$37/page (and reduces publication costs from \$100/page to \$80/page).

In 2014, the Transactions is expected to bring a subscription/IEEEXplore gross revenue to the Society on the order of \$920k, at an expense of about \$680k to produce and deliver (8500 pages at \$80/page), resulting in a net revenue of around \$240k. Had we remained at \$100/page with full editing, this income would have been reduced (by \$170K) to just \$70K. Frank noted that we could bring the net revenue to \$340K, say, by reducing the number of pages from 8500 to 7250. This could be done by reducing the

also to a suggestion of Prakash Narayan. Here the idea is to create overlapping EiC terms. In the proposed implementation, there would be two people in the pipeline: an EiC and a past-EiC. In general terms, the EiC handles the review process, while the past-EiC handles the production process. The natural evolution would be to serve as EiC for 18 months and as past-EiC for 18 months. The technical areas of the EiC could be chosen to complement that of the past EiC (e.g., one in coding theory, one in Shannon theory). The pipeline model reduces the EiC workload by about a factor of 2.

Frank then presented the potential bene ts and disadvantages of the two models. The EiC seeks the advice of the Board on the issue of a transition to a new editorial board structure.

In the discussion that followed, Abbas indicated that he has asked IEEE about posting supplementary material with papers on IEEE explore, and would inform the BoG of IEEE's response. It was noted that peer-reviewed supplementary material provides a way to reduce costs without sacri cing the paper's completeness. It was also noted that award-winning papers have been long. Rather than imposing hard limits and over length charges, AEs could be vigilant not to let unnecessary material be published. Instead, some material could be set aside in a supplementary document. It was noted that this makes for easier reading and indeed is a well established practice in other journals. Some expressed the view that AEs should be trusted to determine paper length. It was suggested that a page limit might lead to a larger number of shorter papers.

Other questions raised include the following. Should we charge non-members to publish? Should we charge authors a per page amount for publishing? Should we coordinate with other societies to negotiate page charges with IEEE? It was pointed out that almost all of the societies have page limits and overlength

It was suggested that a YouTube tutorial is needed on how to make a video, and that a theme/topic be chosen to anchor the competition. It was also suggested that the competition could bene t from more publicity. \$10K has been budgeted for student subcommittee activities this year. Abbas indicated that the student committee can come back to the BoG if the budget runs out.

13. Joerg Kliewer presented a report for the Ad Hoc Committee on Young Professional Program (YPP). The committee members are Emina Soljanin, Ram Zamir, and Joerg Kliewer. The focus of the committee is to assist and promote \young professionals" actively and e ciently. There is prevailing impression among students and postdocs that there is little professionally available for information theorists. The committee is trying to address this impression by identifying IT-related problems in industry, elds where IT can have an impact, and IT people who are successful in industry and other disciplines. Possible courses of action include panels where participants tell how IT help them in their work, awards for junior IT graduates working in other elds or in industry, and plenary talks by senior ITs working in other elds or in industry.

In the discussion which followed, it was suggested that we should communicate to students what is information theory. The possibility of an information theory MOOC was suggested. An industry impact award was also suggested.

14. Matthieu Bloch presented the report on the Ad Hoc Committee on Media Resources. The committee has started investigating options to develop a long-term and sustainable approach to handle ITSoc's numerous media resources. Following Gerhard Kramer's suggestion, the committee has initiated discussion IEEE.tv, an IEEE-wide e ort that was launched in 2007 and that aims at making media resources (essentially videos) available to the general public and IEEE members. In particular, IEEE Societies have the option of creating individual channels (similar to YouTube channels) to stream their own media resources. IEEE.tv can create a channel and host videos for us at no cost. The default video player can be customized to t ITSoc's website theme for UPoltcue(IT-relaa06(to)-306(orsUPolt))()-307(c)28(34(I)-35(in)-)19(mor8(34mo8(yth

ITW 2014 in Hobart has submitted its budget for approval. The surplus is 15% in expected and pessimistic scenarios. Details are available on the web. The conference committee recommends BoG approval.

Motion: To extend a load request of \$40k for ITW 2014 in Hobart. Motion was passed.

ITW 2015 in Jerusalem has submitted its budget for approval. The surplus is around 10% for both optimistic and pessimistic scenarios. Details are available on the web. The conference committee recommends BoG approval.

Motion: To approve the budget for ITW 2015 in Jerusalem. Motion was passed.

In terms of future conferences, interested groups for ISIT 2018 and beyond include Stockholm (contact: Lars Rasmussen), Melbourne (contact: Emanuele Viterbo), Chicago (contact: Daniela Tuninetti, Randall Berry), New York (contact: Aaron Wagner, Roy Yates). For ITW 2016 and beyond, interested groups include Napa, California (contact: Andrea Goldsmith), and Armenia (contact: Gurgen Khachatryan).

Moving onto requests for technical sponsorship. Technical sponsorship is subject to the condition that the sponsored conferences will pay fees if imposed by IEEE. Conferences need to be alerted about possible costs from IEEE.

For Allerton, ITSoc has provided technical co-sponsorship since 2008. The conference committee recommends BoG approval.

Motion: To approve technical sponsorship for Allerton 2014. Motion was passed.

For the International Symposium on Problems of Redundancy in Information and Control Systems, ITSoc has provided technical co-sponsorship in 2007, 2009 and 2012. The conference committee recommends BoG approval.

Motion: To approve technical sponsorship for International Symposium on Problems of Redundancy in Information and Control Systems 2014. Motion was passed.

For the International Conference on Systems, Communications and Coding, ITSoc has provided technical co-sponsorship in 2002, 2006, 2008, and 2013. The conference committee recommends BoG approval.

Motion: To approve technical sponsorship for 10th International Conference on Systems, Communications and Coding (SCC 2015), Feb 2-5, 2015. Motion was passed.

The meeting was adjourned at 4:55 PM.