

IEEE Information Theory Society Board of Governors meeting minutes

Hotel NH Plaza de Armas, Sevilla, Spain, 09.09.2013, 10AM-4PM

Edmund Yeh

Present:

Matthieu Bloch, Helmut Bölcskei, Giuseppe Caire, Mike Casey, Michelle Effros, Abbas El Gamal, Michael Honig, Joerg Kliewer, Gerhard Kramer, J. Nicholas Laneman, Muriel Medard, Alon Orlitsky, Emina Soljanin, Rüdiger Urbanke, Sergio Verdú, Edmund Yeh, Aylin Yener, Ram Zamir.

The meeting was called to order at 10AM by the Information Theory Society (ITSoc) President, Gerhard Kramer, who welcomed the Board of Governors (BoG). Gerhard congratulated Alon Orlitsky on his recent election to Second Vice President of ITSoc.

1. Gerhard presented the President's Report. Gerhard gave an overview of the main items of business. These include proposed changes in the Bylaws, affecting the organization of the Membership Committee (the Student, Outreach, and School subcommittees are proposed to have their own chairs), and the constitution of the Thomas M. Cover Dissertation Award. On publications, the main item is the proposed change to moderate editing, which would play an important role in keeping the ITSoc budget in the black. On initiatives, six initiatives have been proposed subject to the 50% spending rule for the Society. Two Student Committee initiatives for ISIT have been approved. One WITHITS video initiatives have been approved. Two Online Committee initiatives and a LaTeX-to-XML conversion pilot are up for approval.

Regarding the budget, due to a change in the IEEE distribution formula, which will be phased in during 2014-2016, the ITSoc budget will be going into the red for 2014, and sliding further into the red for 2015-2016, if there is no change toward moderate editing. On the Transactions, there is consensus that the Transactions are getting too big to handle with the current model, and that costs should be reduced.

2. Aylin presented the Treasurer's Report. Aylin first discussed conference closings. The closing process for ISITs, ITWs, and Schools are within the timelines IEEE suggests, and are now being completed swiftly without problems. Healthy surplus have been reported in all our conferences. ISIT 2013 is in the process of closing already.

Aylin next moved to the budget. The 2013 budget as finalized in November 2012 was predicting a \$159k surplus. As of August 2013, the predicted end-of-year surplus is \$20k. Two initiatives have already been approved: Student Committee (\$4k) and WITHITS (\$8k). Two more are up for vote: Online Committee (\$50k) and a publication pilot project (\$25k). Aylin noted that initiatives requiring less than \$50k does not require IEEE approval. The Society determined in July that we can spend between \$70k and \$100k on initiatives before the end of the year.

For 2014, print subscription fees have been increased to \$80 for non-IT IEEE members and \$105 for non-IEEE members (with student rates at 50% discount). Due to the change in the IEEE publication revenue algorithm, the budget balance is projected to be -\$35k for 2014. If moderate editing is adopted, the budget balance is projected to be +\$60k. This includes the \$30k we are spending on the Schools. Moderate editing would reduce Transactions expenses from about \$836k to about \$688k (from \$103 to \$80 per page).

3. Giuseppe Caire presented the report of the Constitution and Bylaws Committee. Giuseppe focused on proposed changes to the Bylaws, which include the following.

- Article V, Section 1. The Membership and Chapters Committee will become the Membership Committee. The Student Committee will become a subcommittee of the Membership Committee.
- Article V, Section 4. The Shannon Award Selection Committee shall consist of the President, First Vice-President, Second Vice-President, and four other members appointed by the Nominations and Appointments Committee before January 15.
- Article V, Section 5. The ISIT Student Paper Award will be renamed the IEEE Jack Keil Wolf ISIT Student Paper Award. A subcommittee of the Awards Committee shall be responsible for selecting the recipient of the IEEE Information Theory Society Thomas M. Cover Dissertation Award, according to Article VII, Section 8. The Cover Dissertation Award Subcommittee shall be appointed by the Nominations and Appointments Committee by December 31 of the previous year.
- Article V, Section 6. The standing subcommittees of the Membership Committee shall include the following: A) Student Subcommittee, B) Outreach Subcommittee, C) School Subcommittee.
- Article V, Section 6. The Student Subcommittee shall consist of the 2nd Vice-President, a Student Subcommittee chair, and at least two graduate students or postdoctoral fellows. The Subcommittee chair will be appointed by the 2nd Vice-President in consultation with the Nominations and Appointments Committee, and with approval by the Board of Governors. In turn, the Student Subcommittee chair will appoint at least two additional members. Typically the Student Subcommittee chair will serve for three years. The Student Subcommittee shall be responsible for providing oversight of the Society's student activities including planning and implementation of student activities at Symposia and Workshops.
- Article V, Section 6. The Outreach Subcommittee shall consist of the 2nd Vice-President, an Outreach Subcommittee chair, and such additional members as are appointed by the Outreach Subcommittee Chair. The Subcommittee chair will be appointed by the 2nd Vice-President in consultation with the Nominations and Appointments Committee, and with approval by the Board of Governors. Typically the Outreach Subcommittee chair will serve for three years. The Outreach Subcommittee shall be responsible for providing oversight of the Society's outreach activities, including: (i) planning and implementation of activities at symposia and workshop that address needs and encourage participation of the Society's underrepresented demographics, while being of interest to the community at large, and (ii) creating services, such as the mentoring network, that address needs of current members or are designed to encourage participation of potential future members of the Society.
- Article V, Section 6. The School Subcommittee shall consist of the 2nd Vice-President, a School Subcommittee chair and at least one additional member. The Subcommittee chair will be appointed by the 2nd Vice-President in consultation with the Nominations and Appointments Committee, and with approval by the Board of Governors. In turn, the School Subcommittee chair will appoint at least one additional member. Typically the School Subcommittee chair will serve for three years. The School Subcommittee shall be responsible for providing oversight of the schools with approval of specific schools left to the Board. Specific responsibilities include: (i) monitoring the pipeline of school proposals, stimulating new proposals, and coordinating organizing teams as needed; (ii) maintaining guidelines for schools and helpful information and suggestions.
- Article V, Section 6. In addition to the activities of the Subcommittees, the Membership Committee shall be responsible for maintaining up to date membership records, a roster of Chapter officers, and a summary of current Chapter activities. The Membership Committee shall recommend measures for disseminating information about the Society and for encouraging interest in Society activities among

prospective members. It shall respond to membership inquiries and shall periodically ascertain the opinions of the membership with regard to Society policies and activities. Also, the Membership Committee is charged with selecting an IT Society Chapter to receive the Chapter of the Year Award.

- Article V, Section 6. The Aaron D. Wyner Distinguished Service Award Selection Committee shall consist of the President, Junior Past President, and three members appointed by the Nominations and Appointments Committee before January 15.
- Article V, Section 10. The Conference Committee shall consist of the Society Conference Committee Chair, who shall serve as an ex-officio voting BoG member, the Society Treasurer, the President and 1st Vice-President as ex-officio members, and at least two additional members.
- Article V, Section 12 of the current Bylaws shall be deleted.
- Article VII, Section 1. Awards sponsored and co-sponsored by the Society shall include the IEEE Jack Keil Wolf ISIT Student Paper Award and the IEEE Information Theory Society Thomas M. Cover Dissertation Award.
- Article VII, Section 2. For the winner of the Shannon Award, in addition to the honorarium, the Information Theory Society will pay the winner's travel expenses and waive the ISIT registration fee. The Claude E. Shannon Award is given to at most one individual each year. A person deceased shall not be considered for the Award, although if the award winner dies before receiving the award, he or she shall be considered the Shannon Award winner for the year selected. The committee may choose not to give the award.
- Article VII, Section 3. The Information Theory Society Paper Award consists of an appropriately worded plaque for each author and an honorarium of \$1,000 for a paper with a single author, or an honorarium of \$2,000 equally split among the authors of the paper.
- Article VII, Section 5. The purpose of the Chapter of the Year Award is to recognize annually a chapter that has provided their membership with an outstanding overall set of programs and activities. The selection is governed by Article V, Section 6.
- Article VII, Section 6. The IEEE Communications Society and Information Theory Society Joint Paper Award (ComSoc/ITSoc Joint Paper Award) consists of \$500 and an appropriately worded plaque for each author (total cash award not to exceed \$1,000 for each paper).
- Article VII, Section 8. The IEEE Information Theory Society Thomas M. Cover Dissertation Award will be given annually to the author of an outstanding doctoral dissertation contributing to the mathematical foundations of any of the information sciences within the purview of the Society including, but not limited to, Shannon theory, source and channel coding theory, data compression, learning theory, quantum information theory and computing, complexity theory, and applications of information theory in probability and statistics. Each nominated dissertation must have been successfully defended during the two calendar years prior to the award year. Only English language versions will be considered. The award consists of an appropriately worded plaque and a \$1000 honorarium. The selection of the winning dissertation will be made by a subcommittee that includes the Awards Committee Chair and four other Society members selected by the Nominations and Appointments Committee, at least two of whom are members of the Society Board of Governors. The Subcommittee Chair is selected by the Nominations and Appointments Committee. Dissertations will be reviewed for technical depth and significance of the research contribution, potential and realized impact on

theory and practice, and quality of presentation. A Call for Nominations will be published in the Information Theory Society Newsletter and posted on the Society website at least 3 months prior to the submission deadline. Nominations must be submitted by the dissertation advisor and must include (1) a copy of the dissertation, (2) copies of all refereed papers (published or submitted) spawned by the dissertation, (3) a CV of the dissertation author, (4) a statement from the nominator on the qualifications of the dissertation for the award, (5) a maximum of three letters of support submitted directly to the chair of the Society Awards Committee. Nominations must be submitted by January 15 of the award year. The selection of the winning dissertation will be completed by March 15. The recipient will be informed by the Society President after the selection has been made, and no later than April 1. The award will be presented at the IEEE International Symposium on Information Theory (ISIT) of the award year, and will be announced in the Information Theory Society newsletter and on the Society webpage.

- Article VIII, Section 2. The IEEE Information Theory Society will uphold the IEEE Conflict of Interest policy as stated in the IEEE Bylaws.

Motion: Vote to approve the proposed changes to the Bylaws. Motion was passed.

4. Gerhard Kramer presented the report of the Publications Committee on behalf of Yiannis Kontoyiannis. The main focus is the proposed switch to moderate editing for the Transactions. Without moderate editing, the budget balance is currently at -\$35k for 2014. Switching to moderate editing would save about \$150k, and lets the society spend on other items such as initiatives and students. Yiannis (current EiC) and Helmut (past EiC) both recommend the move to moderate editing. A main issue with switching to moderate editing is that some papers (about 10-20% or 800-1600 pages) will still require full editing (for language quality). One approach to solving this problem is for AEs to decide which papers require full editing, with approval from the EiC. The authors of these papers are responsible for paying for the full editing. The IEEE recommends and uses PreMediaGlobal for these services, costing \$45 per page.

A short-term alternative to moderate editing is to impose a page limit. A long term alternative is to piggyback on the editing services of IEEE ComSoc. But this has complicating issues.

Discussion followed. It was suggested that the AE permit the author of a paper requiring full editing to resubmit the paper after editing by a friend or another editor. It was also suggested that the authors be educated to properly edit the paper for language quality before submission. It was pointed out that if the submitted paper is technically good but poor in English exposition, the AE would have definitely noticed the need for full editing after the first round of reviews. It was felt that since the EiC is already overburdened with duties, the recommendation for full editing should be made by the AEs. It was noted that other journals reject papers based on poor English quality, and therefore the proposed policy for full editing is quite reasonable.

Motion: Adopt IEEE moderate editing for accepted papers to the Transactions, and assign the task of determining and implementing a procedure to the Editor in Chief. Motion was passed.

5. The Conference Committee report by Elza Erkip was presented. ITSoc technical co-sponsorship and IEEE Xplore acquisition are requested for ITA 2014 and CISS 2014. ITSoc has been continuously providing technical cosponsorship for both conferences. The request has been approved unanimously by the Conference Committee.

Motion: Approve ITSoc technical co-sponsorship and IEEE Xplore acquisition for ITA 2014 and CISS

2014. Motion was passed.

6. Matthieu Bloch presented the Online Committee report. The Online Committee has discussed with Six Feet Up various ways of expanding its use of social media (LinkedIn, Facebook, twitter, etc.). The Committee is presently planning to add several additional features to the website: (1) the ability to share news items and events on Facebook, twitter, LinkedIn, etc. by providing convenient links at the bottom of each page, and (2) the ability to create news items from a Twitter/Facebook/LinkedIn post.

Matthieu mentioned that ITSoc has to consider upgrading our system from Plone 3 to Plone 4.2. While we could maintain the current system for a few more years, the benefits of upgrading to the latest version would include improved website responsiveness and fewer incompatibility issues for maintenance in the long term. The cost of the upgrade will be around \$30k. The migration can be scheduled in several steps and over the course of several months.

The Online Committee is still exploring how to best leverage our media resources. In the short term, we will enhance the Lecture object to embed a media player linking to files stored on media.itsoc.org. However, the Online Committee feels that this is not sustainable in the long term unless we develop clear strategies for licensing and hosting.

An important issue related to videos is the licensing we will use to make these videos public. Presently, all our media resources are handled in a rather informal way, usually by making sure that speakers have no objection to the posting of the videos, without worrying about copyrights, and ownership. As we increase the visibility of our media resources, the Online Committee feels that ITSoc should develop clear guidelines and rules. Licensing has concrete consequences on the management of media resources. It determines whether we can host resources on third-party websites (vimeo, youtube, etc). It determines if other people can reuse these resources, and under what conditions. The Online Committee would like to suggest the creation of a sub-committee to come up with a draft policy for the BoG. Since the implications of such a policy would have impact beyond online resources, the Online Committee is suggesting to make the sub-committee as broad as possible, possibly including the newsletter Editor and the EiC.

A discussion followed. It was pointed out that various taped lectures on information theory are available and represent legacy resources. In particular, there are five years of prominent lectures and tutorials for IT schools. Conference organizers have also taped various lectures. These materials should be made available. In many cases, generating, storing, and disseminating videos require paid professional services. The Conference Committee, the School subcommittee, and the Online Committee are encouraged to collaborate on the effort to make the videos accessible to the community. A statement is sought from the BoG supporting the effort to archive video and to make them widely accessible.

It was suggested that the Society use cloud resources for new media. Sustained support over 3 years for new initiatives is encouraged. With regards to licensing, it was pointed out that the Society should talk to IEEE, which should have licensing policies in place.

7. Gerhard Kramer, Matthieu Bloch, and Mike Casey presented proposals for new initiatives for 2013. Gerhard explained that the Society had requested \$60k from the reserves for the Schools, whereas we could have requested \$100k based on our reserve levels. We asked for “special attention” since we have high reserves and have not spent against them in the past. IEEE TAB had a total request of \$2.8 million from all societies, whereas TAB bylaws allow spending only up to \$1.8 million. IEEE TAB reduced all requests by 50%, meaning ITSoc can spend only \$30k from the reserves, with the other \$30k coming from the budget. It is suggested that the Society submit a bigger request next time.

There are three proposed initiatives. Two initiatives come from the Online Committee.

- Initiative 1: Hosting, archiving, and disseminating media resources. Over the years, the society has accumulated many videos and audio recordings of plenary lectures and Shannon lectures, as well as several lectures delivered during the North-American School of Information Theory. Most of these resources are currently archived on <http://media.itsoc.org> and are not well integrated in the new website infrastructure. In addition, videos and audio recordings are archived in a variety of formats that make their dissemination difficult. The Online Committee proposes to develop a sustainable infrastructure to host, archive, and disseminate all past and future media resources of the IT Society. The objective is to integrate these resources to the existing website, to improve their accessibility and their visibility. This effort will complement the outreach efforts of the society by making these resources available to a wide audience. The Online Committee will interact with Six Feet Up (our current developer) to specify, develop and test such an infrastructure. A key aspect of the initiative is to make this infrastructure sustainable in the future, not only in terms of data storage, but also in terms of copyrights.
- Initiative 2: Encouraging online committee participation. With the deployment of a Content Management System in 2009, the IT society now relies on a state-of-the art web infrastructure to facilitate the dissemination of information to the community and to support its various sub-committees. The analysis of the web traffic into the website has highlighted the success of the infrastructure. The Online Committee proposes to further engage the IT Community at large by integrating forums in its website. The objective is not to duplicate resources that can already be found online, but rather to facilitate and encourage discussions and question-asking on IT-specific material. In addition, other committees, such as the Outreach Committee, the Student Committee, or WITHITS, could also deploy forums for specific use. The Online Committee will again interact with Six Feet Up to specify, develop, and test the forum.

Given the ambitious nature of the initiative, the timeline for the specification, development and testing is expected to be a year (specifics will depend on the development slots available at Six Feet Up). The requested budget for both initiatives is USD 49,999.

Motion: Fund the Online Committee initiatives for up to \$49,999 until the end of 2013, with priority to enhancing and sustaining media content. Motion was passed.

Mike Casey presented a proposal on automated journal production. The goals of the proposed project include (1) determining the feasibility of (semi-) automatic conversion, (2) determining the feasibility of delivering full-text XML files, including figures and print ready PDFs, to IEEE, (3) prototyping an author-friendly environment, (4) prototyping a work-flow for typesetting, editing, and proofing, (5) understanding and verifying the costs. The deliverable will be a report on feasibility and a plan for implementation. The phases of the project consist of: prototyping and conversion from LaTeX to XML (6 weeks), prototyping conversion to camera-ready PDF (4 weeks), and report on findings and proposal for the future. The estimate cost for Phase 1 is \$17,460 and the cost for Phase 2 is \$11,440, giving a total cost of \$28,900.

Gerhard posed the following question to former EiC Helmut: “How does Latex-to-XML conversion fit into the switch to moderate editing? Can we still save money by doing this? How much?” Helmut replied, “I see the switch to moderate/light editing as the first step in a longer process to an editing solution that is affordable and high quality. ... If the now project turns out successful this would bring down the editing cost significantly as Mike Casey told me that they could produce XML (which IEEE requires) at a fraction

of what IEEE charges. Of course, there are uncertainties But, all in all, I feel it is worth investing the money into the now project.”

In the discussion which followed, Mike Casey added that IEEE currently charges \$90 per page on editing, LaTeX to XML conversion and PDF generation. A question was raised as to whether IEEE will accept direct LaTeX to XML conversion from the authors. It was pointed out that if the project output can provide both XML and PDF, then authors could submit both to IEEE. It was noted that IEEE already has LaTeX to XML converters, which are often faulty and must be corrected by hand. The proposed project is seen by some to be a good long-term path: going directly from LaTeX to XML and circumventing mistakes.

It was suggested that one possible path consists of moderate editing with IEEE, and then paying \$2.5 per page for LaTeX to XML conversion by IEEE. It was also suggested that ITSoc partner with other societies in this effort. With regards to the proposed project, it seems important that ITSoc should clarify with IEEE on whether (1) they will accept XML output as a submission, and (2) they will lower the cost of editing and production if XML output is accepted. It was noted that IEEE has previously accepted XML output from ComSoc.

There was further discussion on who would represent the society in speaking with IEEE on this matter. Alon Orlitsky indicated he will check into the feasibility of the LaTeX to XML proposal. Alon and Mike will contact IEEE to obtain more information. In the mean time, ITSoc will also keep in touch with other societies on this matter.

The vote on supporting the proposed project is tabled for now.

8. Joerg Kliever presented the Outreach Committee report. Joerg first discussed the mentoring program. There are currently 27 mentor/mentee pairs. The overflow of interested mentees has been resolved, with some mentors still unassigned. The ITA panel discussion “How to navigate the job market,” co-organized with Student Committee, was a great success, with 150 attendees. Panelists included Guiseppa Caire, Elza Erkip, Dongning Guo, and John Smee (Qualcomm). At ISIT 2013, a mentoring get-together event attracted 30 attendees, with many interested in the program. New activities include establishing a discussion forum on the IT website to improve networking, particularly among junior researchers in the society. Finally, Joerg pointed out that mentoring activities are an essential part of the IEEE Young Professionals Program (formerly GOLD) program.

9. Discussion on the Ad Hoc Committee on recognition of young professionals. The committee consists of Joerg Kliever, Emina Soljanin, and Ram Zamir. It was suggested that the ad hoc committee should meet and prepare a report for ITA 2014. It was suggested that the WITHITS approach can be extended to all members. Perhaps the Society should look to sister societies and pair industrial members with students. It was suggested that CVs of new graduates should be put into a repository to facilitate future career moves. More industrial focus is needed in the Society. Perhaps events on intellectual property can be organized and interesting patents can be recognized. The aim is to maintain a connection between the Society and members which go into industry. There was discussion on issues surrounding a proposed award for recent graduated “rising stars.”

10. Discussion on the Ad Hoc Committee on Future Directions. The committee consists of Jeff Andrews, Andrea Montanari, Michelle Effros, Olgica Milenkovic, Alex Dimakis, Lara Dolecek, Muriel Medard, and Sriram Vishwanath. It was suggested that the committee clarify its purpose. Perhaps establishing new workshops on future directions is a worthy undertaking for the committee. New connections need to be made to other areas, such as big data and machine learning.

11. Discussion on the Ad Hoc Committee on the Padovani Fund. The committee consists of Mike Honig and Ubli Mitra. Mike mentioned that Roberto Padovani and Qualcomm initially contributed \$60k to the Fund, which has grown to \$70k. Padavani is now pledging \$40k more, and Qualcomm may match the pledge to bring the contribution to \$150k. Gerhard proposed that the BoG draft a letter formally thanking Roberto Padovani for his generous support of ITSoc activities. The letter could be delivered at the next ISIT.

12. Discussion on cost differentiation at symposia, workshops, and schools for ITSoc vs. non-ITSoc members. ITSoc membership appears to be declining and the Society is currently not offering preferential rates to ITSoc members.

Motion: The Society strongly recommends cost differentiation of at least \$100 for members and \$50 for student members for registration fees for IT society-sponsored symposia, workshops, and schools. This recommendation shall be put into appropriate guidelines. Motion was passed.

13. Discussion on ISIT Student Paper Awards. There is agreement that the criteria for choosing award-winning papers should be tightened, and information regarding the specific contributions of the various authors must be submitted for award consideration.

14. Discussion on geographic distribution of ISITs. The main issue is the ordering of ISITs and the process of soliciting ISIT proposals. 50% of ITSoc membership still resides in the U.S. Having ISITs take place every other year in the U.S. requires building a pipeline of proposals. Currently, there does not appear to be a desire to maintain a rule of alternating between a U.S. and a non-U.S. location for ISITs. It is recommended that guidelines be given to the Conference Committee to solicit ISIT proposals far in advance.

15. Discussion on ideas for encouraging paper award nominations. Currently, nominations are solicited from the AEs. Generally, there are few nominations submitted. There is a need to actively push the calls for paper award nominations.

The BoG thanked Gerhard for his services as President, and Giuseppe and Nick for their services as BoG members.

The meeting was adjourned at 5:43 PM.