

Minutes of the Control Systems Society Board of Governors
Meeting December 13, 2020
Zoom in lieu of Jeju Island, Republic of Korea

1. Call to Order and Approval of Agenda

President A. Annaswamy called the meeting of the Control Systems Society (CSS) Board of Governors (BoG) to order at 1:00 PM (UTC time) on December 13, 2020. She welcomed all attendees and reminded BoG about the objectives of the meeting. After reviewing the meeting procedures, including the mechanism for voting on motions using Zoom, she asked the attendees to introduce themselves. The following members of the BoG were in attendance:

- Alleyne, A.
- Annaswamy, A.
- Balakrishnan, V.
- Beck, C.
- Bitmead, R.
- Cassandras, C.
- Chen, H.
- Cortés, J.
- Di Benedetto, M. D.
- Duarte, M.
- Egerstedt, M.
- Franco, E.
- Gayme, D. F.
- Giua, A.
- Hespanha, J.
- How, J.
- Kalsi, K.
- Krstic, M.
- Lin, Z.
- Mostofi, Y.
- Padhi, R.
- Pappas, G.
- Parisini, T.
- Scherpen, J. M. A.
- Sun, J.
- Yildiz, Y.

Additionally, the following visitors attended the meeting:

- Abramovitch, D.
- Baillieul, J.
- Braatz, R.
- Bullo, F.
- Chesi, G.
- Chung, C. C.
- Doyle, F.
- Fleisher, A.
- Fujita, M.
- Glavaski, S.
- Heemels, M.
- Ito, H.
- Jia, S.
- Patel, R.
- Seatzu, C.
- Speranzon, A.
- Spurgeon, S.

2. Approval of Minutes

Quorum was established, and the meeting agenda approved with unanimous consent. Next, the minutes of the BoG meeting of June 2020, held on zoom in lieu of Denver, CO, USA were approved unanimously.

3. Approval of Record of Electronic Motions of July, 2020

Next, the record of approval by BoG of the electronic motion was approved unanimously.

4. Consent Agenda

Annaswamy asked the BoG for approval of the consent agenda, which was approved unanimously.

Before moving to the discussion of action items, Annaswamy welcomed Richard Braatz and Chung Choo Chung, the General Co-Chairs of CDC'20 to the meeting. They welcomed everybody to the conference, outlined the wide range of online activities of CDC'20, and thanked the community for the strong support received.

Action Items

Annaswamy presented the following motion.

- **Motion:** *To create a new CSS Conference named Young Professionals Virtual Conference*

Annaswamy presented an overview of the proposed YP conference. This conference will be 100% virtual, with submission deadline in October, acceptance decisions in January, and the actual conference taking place in March (thereby out of phase with CDC's March-to-December and CCTA's January-to-August timelines). The target is 150 accepted papers, presented over 3 days. The aim is to keep the conference registration low, and have the requirement that the 1st author should be a YP. The program will be divided into 4 tracks: tutorial, implementation/code, applications, and theory. The plan is to have the first edition's call for papers out in June 2021, with submission deadline October 15, 2021, and conference dates March 15-17, 2022.

She then asked R. Patel, Chair of the Young Professionals Standing Committee, to elaborate on the details of the proposal. Patel provided further background on the proposed conference, stating that it should be run by young professionals, and target people who do not attend the other two CSS conferences, either for financial or work-related reasons. The goal is to engage more young professionals in CSS. The conference is designed to be virtual, asynchronous and interactive, and offer a venue to try new ideas. Ideally, the conference will also become a location for resources for YPs (e.g. software repositories, code contributions), promote continuity of discussion, and provide YPs with tools and issues relevant to their community. Each day of the conference will be scheduled over at most 4 hours. The tutorial sessions organized by YPs will allow participation from industry and provide a mechanism for them to participate outside the publishing model. Envisioned outcomes include more engagement from YPs and industry in CSS, increased diversity, and providing a testing ground for new ideas and formats. Plans for the first edition include Rush Patel as General Chair, Karl Ludwig Fetzer as Program Chair, and Anu Annaswamy serving in an advisory capacity.

J. How asked whether there would be an option to have the paper be simultaneously submitted to L-CSS (as is the case now for both CDC and ACC). Annaswamy replied that there are plans to add this possibility in the future if the conference is successful. V. Balakrishnan voiced concern about the use of the term "young professional" versus "new professional" because of the age discrimination connotations, and asked what IEEE

position was in regards to its legality and technicality. Annaswamy said that we are using the name as a technical, not an age term, and indeed that the aim is to give preference to people who are recent entrants to technology. Annaswamy said that the use of the YP term was consistent with IEEE policy, which defines a YP as a student or somebody having obtained a Bachelor's degree in the last 15 years. M. Egerstedt expressed support for the proposal, adding that we should run it as an experiment, keep an open mind, and adapt it as we gain experience. Annaswamy agreed and pointed out that feedback could be collected through a survey of participants. T. Parisini shared Egerstedt's view, and stressed that this initiative will not only help recruit new YP to CSS, but is also a way of enhancing our impact on industry by improving the communication between YPs and industry. D. Abramovitch expressed strong support for the idea, emphasizing that the virtual format brings down current barriers for participation and will encounter less resistance from management. To get enthusiasm from management, he stated that the conference should offer YPs the opportunity to learn something new that they can use in their jobs in the short term (6-12 months). He thought the different tracks were a great idea, and made the point that, beyond theoretical papers, we also need to find a way to have industry people share ideas and make contributions about stuff they are working on without giving away IP (e.g., maybe the specific application runs into IP issues whereas the general idea does not). Annaswamy stated that it would be a good idea to capture this in the call for papers, and stressed that how papers will be evaluated, along with many other details, are still things to be worked out. D. Gayme emphasized that we do not want to exclude papers that are more theory-inclined, as students producing such papers may want to interact with industry. Annaswamy pointed out that indeed this is the reason for the four different tracks, and that the organization will keep a close eye on how the experiment unfolds to revise the scope as needed.

The motion was approved with one abstention.

Vice President for Conference Activities, Alessandro Giua, presented the following motion.

- **Motion:** *To approve the preliminary budget for CCTA 2022.*

Giua presented the background for this motion. The General Co-Chairs are Alessandro Beghi and Fabrizio Dabbene (approved by BoG in 2018 CDC) and the Program Chair is Oliver Sawodny (approved by BoG in 2019 ACC). The venue and dates are Trieste, Italy, August 23-25, 2022 (approved by BoG in 2019 CDC). The expected number of registrants is 350. The registration fee for CSS members is €630, and for IEEE members is €655. VAT excluded, the expected income is €196,293, the expenses are €164,100, for a surplus of €32,193, consistent with the 20% surplus policy of IEEE.

The motion passed unanimously.

Giua then presented the following motion.

- **Motion:** *To approve the preliminary budget for CDC 2022.*

Giua presented the background for this motion. The General Co-Chairs are Andrea Serrani and Elena Valcher (approved by BoG in 2018 CDC) and the Program Chair is

Christophe Prieur (approved by BoG in 2019 ACC). The venue and dates are Cancun, Mexico, December 6-9, 2022 (approved by BoG in March 2020 evote). The expected number of registrants is 1800. The registration fee for CSS members is \$650, and for IEEE members is \$680. VAT included, the expected income is \$1,220,370, the expenses are \$1,019,848, for a surplus of \$200,522, consistent with the 20% surplus policy of IEEE.

The motion passed unanimously.

Giua then presented the following motion.

● **Motion:** *To approve August 16-18, 2023 as the dates for CCTA 2023.*

Giua presented the background for this motion. The General Chair of CCTA is Andrew Alleyne (approved by BoG in 2019 ACC) and the Program Chair is Kira Burton (approved by BoG in 2019 CDC). The venue for CCTA 2023 is Bridgetown, Barbados (approved by BoG in 2020 ACC). CCTA conferences are usually held in August. The chosen dates are Wednesday through Friday, with workshops on Tuesday. The proposed dates will allow for family vacations and no apparent conflict with other major conferences. The conference hotel is the Hilton Barbados and will offer excellent rates (\$180 plus tax) during the third week of August.

BoG expressed excitement for the conference location.

The motion passed unanimously.

Before presenting the next motion, Giua stated that he welcomes society members to contact him if they are interested in organizing CDC or CCTA. He can walk them through the steps required to present a proposal and give a general overview of what the conference organization entails.

● **Motion:** *To appoint Krishna Busawon and Eric Rogers as General Co-Chairs for CCTA 2024.*

Giua presented the background on this proposal, which is coming from the UK & Ireland CSS Chapter. In the past, the UK has hosted a Conference on Control Applications (Glasgow, 2002) and a CDC (Brighton, 1991). The planned venue is Northumbria University, Newcastle, and Sarah Spurgeon will also be involved in the organization.

E. Valcher pointed out that future GCs should beef up interactions with IEEE and previous GCs of CSS conferences to learn about the intricacies of conference organization. R. Braatz suggested that GCs should recruit OPCOM members in critical positions (e.g., Finance Chair) familiar with the modus operandi of IEEE. Egerstedt asked why the proposal presented Co-Chairs (instead of just a General Chair) and questioned whether we were sliding into the habit, making it a de facto policy. Giua pointed out that this is happening organically, because the organizers are volunteers and recognize that conference organization (particularly outside the US) requires a lot of work. R. Bitmead added that the VP-CA is the person to clarify, as proposals are developed, that it is not necessary to have two GC and/or PCs. Parisini reinforced this point, and speaking as past General Co-Chair for CDC 2013, stressed that if two

volunteers rather than one feel more comfortable running a conference, then that should be ok, making sure they understand it is not a requirement. He also pointed out that this phenomenon is linked to the change in organizing CDC outside the US more often (from every other time before to every third time now). G. Pappas brought up the fact that, in other societies he is involved with, there are usually 2/3 organization proposals for each conference that are discussed and voted on. Since CSS is a volunteer organization, he pointed out the need for running workshops that prepare members to become future GCs, particularly in what pertains to fiscal training. This activity will naturally increase the number of volunteers who may want to get involved in organizing CSS events. Annaswamy pointed out that there is an open call for conference organization posted on the CSS website. She also remarked that there has not been any CCTA organized in the UK so far. Valcher said that in the past, open calls for conference organization have been restricted to MSC/CCTAs. She echoed Pappas' point on the importance of fiscal training and approval of conference contracts by IEEE.

The motion was approved with one abstention.

Giua then presented the following motion.

- **Motion:** *To appoint Maria Prandini and Luca Zaccarian as General Co-Chairs for CDC 2024*

Giua presented the background on this proposal. Both colleagues have a long record of service in CSS. The plan is to organize the conference in Italy. Italy hosted CDC 2013 (Florence) and will host CCTA 2022 (Trieste). A possible venue is Milan. Valcher suggested looking for other venues (Milan might be too cold in December), whereas Bitmead and Parisini expressed support for the location.

The motion passed unanimously.

Vice President for Member Activities, M. Egerstedt, presented the following informational items (out of order according to the meeting agenda, but Egerstedt had to leave shortly after).

Diversity Data on CSS

For a second consecutive year, Egerstedt has collected diversity statistics (gender, geographic region, and academia/industry/government activity) around CSS's different activities. Egerstedt emphasized that diversity of thought requires diversity of background and that, as a society, we need to make sure we keep attention on this issue. He framed increasing diversity as an existential question if CSS truly wants to be global, reflect society as a whole, and engage with industry. Egerstedt mentioned that membership is up, 3% from last year, which was a surprise, since universities and businesses are taking a hit with the pandemic. Overall, we are very much an academic society, which is somewhat to be expected, but some numbers are stark (e.g. DLs are 100% academia). The overall trends are mixed as compared to last year and are summarized in the main agenda and reports document. Egerstedt pointed out limitations in the presented data that still need to be augmented, e.g., IEEE Fellow nominations, program committee members from CCTA, and members of the organizing committee of our conferences.

M. Duarte asked how the presented statistics compared to other IEEE societies, and Egerstedt that we are in the middle of the pack. BoG stressed the importance of collecting statistics with a larger sample size, including not only present and recent past data, but also data from the future (e.g., already approved GC appointments), and making sure it is accurate (e.g., BSP nominations numbers did not look right based on the personal experience of various members). R. Padhi asked whether the data had prompted any recommendations. Annaswamy said that, based on the data, we see that we need to improve our numbers at various levels. A. Alleyne emphasized the importance of keeping the eye on the big picture: the numbers show that we are not doing as well as we would like, and that we need to take action. Egerstedt picked up on this and mentioned a number of control knobs we have used to take action, including appointed members to BoG and being increasingly cognizant of this issue in selecting plenary speakers for our conferences. J. Scherpen stressed the importance of encouraging people to make nominations and Annaswamy pointed out that ensuring a diverse set of nominations is something that can be channeled through the Awards Nomination Committee. S. Glavaski emphasized the fact that diversity also concerns academia versus industry versus government, and that there is a perception in industry and government that if you are accomplished but not in academia, then you are not considered for awards. Looking at award recipients, the list is geared towards academia, indicating some bias. Today, there are many people in industry deserving of these awards. Annaswamy thanked BoG for the excellent points raised, all worthy of further discussion and engagement. Egerstedt pointed out that 2021 is the first year where we have Diversity and Inclusion (D&I) Chairs in our conferences, and that diversity should indeed be interpreted broadly taking academia v industry v government also into account. Gayme reinforced Glavaski's remarks, pointing out that some people come up every year in the award nomination process and that, instead, we should strive to diversify the pool of candidates by making everybody aware of the rules of the game (e.g., ask people to nominate a paper of yours). E. Franco suggested the possibility of funding international students with fellowships focused on improving diversity. Egerstedt concluded by emphasizing the importance of keeping this effort up to give us a richer picture of what is going on.

Award Committee Membership

Egerstedt explained that membership in CSS award committees is typically not revealed. People spend a lot of time evaluating award nominations, but the anonymity means that it cannot be counted as service. The plan is to make award committee membership known, listing it on the website at the end of the year, without specifying the award they were involved with. This has the added benefit of making the process more transparent, while preserving the integrity of the selection process. Braatz mentioned that anyone is allowed to add this service to their CV already, and Egerstedt agreed, adding that now this listing will be verifiable with the published list in the CSS website.

(J. Cortes was not present when the following motion was considered.)

Vice President for Publication Activities, A. Alleyne, presented the following motion.

- **Motion:** *To appoint Sonia Martinez as inaugural Editor in Chief of the Open Journal of Control Systems*

Alleyne presented the background on the selecting process that led to the motion. He

then presented Martinez's biography and CSS editorial experience, and finally concluded with the timeline for the launch of the OJCS.

The motion passed unanimously.

- **Motion:** *To approve a page budget of 6300 pages for the IEEE Transactions on Automatic Control for the year 2022.*

Alleyne presented background on TAC page budget needs. The current backlog stands at 11 months for Full Papers and 9-10 months for Technical Notes. The demand is strong and consistent, so this backlog is unlikely to reduce without some action. This backlog reflects negatively on the TAC. According to the EIC A. Astolfi, the approval of this motion will put the backlog uniformly at 9 months, which is the desired target.

Padhi asked why the financial impact of the motion resulted in a revenue. Alleyne explained that this is an estimate computed by dividing the yearly revenue of the journal by the number of pages published, and extrapolating. Given this information, Padhi asked why not increase the page budget further, and Alleyne pointed out that this falls under the EiC purview. Annaswamy also pointed out that this and the other motions brought up to the BoG occurred during past years in July by which time the CSS budget is already submitted to IEEE, making the process out of order. Therefore, these motions are being proposed to the BoG now in December 2020 in order to have a more causal and logical process. This helps with the society being proactive in exercising planning decisions re: backlog, etc.

The motion passed unanimously.

- **Motion:** *To approve a one-time increase of 750 pages to the page budget for the IEEE Control Systems Letters for the year 2021.*

Alleyne explained that L-CSS has already filled in 1440 of the 1500 pages as of November 12, 2020 (due to, among other factors, influx of papers from ACC'20, where for the first time there was the option to submit L-CSS+ACC papers). Consistent with the rapid publication goal of L-CSS, the motion seeks to keep the backlog down and avoid pushing papers into 2022.

Valcher, the EiC of L-CSS, stated that the journal had experienced a huge increase in submissions this year, more than double the number of papers with respect to last year. The journal has already exhausted the page budget and there are 72 papers in the pipeline, so IEEE is pushing us to increase it. She also pointed out that L-CSS still does not have an impact factor (which is to be expected any time now). F. Bullo asked if the number of papers received under the L-CSS+ACC option was as forecasted and Valcher responded that she had forecasted fewer than the actual number received.

The motion passed unanimously.

- **Motion:** *To approve a page budget of 2500 pages for the IEEE Control Systems Letters for the year 2022.*

Alleyne explained that this motion was in response to a further term projection brought about by the demand and addition of ACC submissions. The current backlog is relatively low but will grow without pro-actively increasing the page budget.

Parisini asked Valcher what the numbers of L-CSS papers submitted only to the journal (i.e., not joint with CDC or ACC), and Valcher responded that about 20%. Parisini stated that in the long term we need to keep an eye on the distribution of papers submitted via the CDC/ACC route (at IEEEExplore, those papers appear via L-CSS instead of in the conference proceedings).

The motion passed unanimously.

Annaswamy presented the following informational items (out of order according to the meeting agenda, but a necessary preamble to the next motion).

CSS Fund

Annaswamy reviewed the timeline of approval of the CSS Fund. The fund, with Bullo and Egerstedt as original architects in 2018, was formally established in February 2020. BoG approved a CSS contribution in the range [\$700K,\$1M] in June 2020, and ExCom approved a precise number of \$850K in October 2020. The \$850K figure comes from 2020 50%-Spending-Rule money (\$783k, the entire sum flowing from the 2019 CSS surplus) and the 2020 CSS operating fund (\$67k). This is money leaving IEEE and going to the IEEE Foundation. There is significant sensitivity to authorizing these transfers and scrutiny comes from the US Internal Revenue Service. CSS was able to address the concerns through careful articulation of its vision. Bitmead and Annaswamy made three presentations to IEEE (TAB FinCom, IEEE FinCom, IEEE Board of Directors), and the chain of approval by all 3 entities was completed in November 2020.

Examples of CSS Fund Initiatives

As a natural follow-up of the previous informational item, Annaswamy explained that now is the time to identify ambitious projects that promote systems and control at a large scale -- activities that can be funded through the CSS Fund. She encouraged BoG to propose both initiatives and developmental efforts for raising more funds. Examples of projects include (but are not limited to) waiving of APC charges for journal publications (motion passed by BoG on July 2020) in developing countries; waiving of registration fees for CCTA and CDC for registrants in developing countries; support of the YP virtual conference in 2022 in terms of registration fee waiver for first-time CDC/CCTA authors; support of a workshop on Control for Societal Scale Challenges; support of a competition that illustrates how control systems-based automation can help in climate change; graduate student scholarships; and travel support to conferences for undergraduate students.

President-Elect, T. Parisini, presented the following motion.

- **Motion:** *To create a new CSS Officer position: Vice President for Diversity, Outreach,*

and Development.

Parisini presented the background of the motion, giving credit to the vision and efforts by Annaswamy, Bitmead, Bullo, and Egerstedt to establish the CSS Fund. The fund builds on many years of membership activities (Women in Control, student travel support, Outreach Fund) addressing D&I. The fund provides a way for CSS to benefit society on a global, diverse, and inclusive scale. Parisini stressed that it is important that the CSS Fund develops (donations, industry support) and becomes sustainable. Implementing this vision requires a person that coordinates a dedicated effort ensuring that the Fund is suitably managed and developed in synergy with our membership activities. The creation of a VP position requires amendments to the Constitution and Bylaws, and with this motion ExCom seeks to ask for BoG approval to initiate the process. Parisini then presented a tentative timeline that includes getting changes vetted by IEEE (January 2021), submitting revised amended Constitution and Bylaws to BoG for approval through an e-motion (March 2021), submission for approval to IEEE VP-TA (April 2021), publishing changes in CSm (April 2021); waiting period of 30 days for any appeal from the CSS community (May 2021); and election of VP-DOD at BoG meeting (ACC 2021, May 2021). He also presented sample versions of the suggested changes to the Constitution and Bylaws (included in the main agenda and reports document), emphasizing the creation of a Diversity, Outreach, and Development Activities Board that would help coordinate the activities of the newly created VP-DOD with the VP-MA, VP-TA, and VP-FA.

Bitmead observed that the most recent changes to the CSS Constitution creating the two-year presidency reduced the number of ExCom members from 9 to 8. The creation of a new VP position will put the number of ExCom members back to 9. Braatz pointed out that this motion was somehow counter to the argument of increasing the voting power of BoG. Bitmead and Cortes clarified that, even with ExCom back to 9 members, the majority of BoG members will still be elected (18) versus ExCom/appointed (9+6=15). On top of this, Parisini remarked that the appointed members to BoG are now done by the Nominating Committee instead of the President. Bullo pointed out that there is no financial impact now to starting the process, but that the creation of the VP position itself will certainly have some. Balakrishnan expressed excitement for the motion and said that having a banner position for D&I was a great idea. He remarked that development is not something we usually do, as it is further removed from voluntary positions, and might require some dedicated training or support. Annaswamy said that this VP position could in fact have IEEE administrative support. Parisini mentioned that PES, which also has a fund, launched a big project for bringing energy to developing countries. Mostofi expressed support and asked whether other societies were creating similar positions. Annaswamy answered that societies have followed different paths (for instance, PES has an Executive Director, which is a paid position) and that, in that regard, CSS is leading the pack. The development aspect takes us in a direction where we need to learn a lot and we are looking at different experiences. Valcher mentioned that she is part of the IEEE D&I committee and that other societies are thinking about similar initiatives. Braatz pointed out the overlap between the new VP position and the footprint of the VP-MA, and asked how the roles and responsibilities will be delineated, particularly in what refers to diversity. Parisini acknowledged this observation and remarked that this will require a team effort, because D&I is too big a topic for a single position. Franco picked up on the comments by Balakrishnan on the need for specialized staff and shared her experience with the Engineering Biology Research Consortium regarding roadmapping, which consists of tracing future research directions for the next 20 years. They do these exercises regularly in close contact with academia and industry, and have liaisons with various funding agencies (DoD, NSF). The documents they produce in fact guide funding

initiatives at these agencies and other institutions. Annaswamy said that roadmapping is not part of our culture, but it was a great idea to consider moving forward. M. Di Benedetto echoed Parisini's comments on the team aspect of this effort and emphasized the strong value that D&I activities give to society members. As incoming VP-MA, she is excited to be part of this effort.

The motion passed unanimously.

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- **Motion:** *Financially co-sponsor the IEEE Transactions on Intelligent Vehicles.*

Annaswamy explained that the journal was started in 2015 by the IEEE Intelligent Transportation Society. The sponsorship ratio is 50% (ITS), 20% (Vehicular Technology Society), 20% (RAS); and 10% (Consumer Electronics). CE is dropping out. The journal has about 160 papers per year, with a 35% acceptance rate. The Journal has posted losses over 3 of the last 4 years, and is expecting a profit of \$8.5K next year. It is expected that the profit will increase drastically when the impact factor comes out. Control seems to be a highly present topic among the papers published, and in fact various CSS members are already involved in the journal (A. Ferrara, S. Lefevre, C. Laugier as Senior Editors; M. Althoff, W.-H. Chen, N. Hashimoto, J. Ibanez-Guzman, P. Khayyer, U. Nunes, S. Onori as Associate Editors; U. Ozguner as Editor in Chief, and P. Ioannou in the Steering Committee). Sponsoring the journal will give CSS one voting member on the Steering Committee.

Braatz asked if the reason was known for why CE is dropping its support, and Annaswamy responded that this was due to internal issues of the society.

The motion was approved with one abstention.

Informational Items

Differential CSS Member Conference Registration

Giua described the following implementation plan for the differential CSS member conference registration category approved by BoG at ACC20:

- CSS Member [X]
- IEEE Member (non-CSS) [X+Y]
- Non-Member [25-30% higher than X+Y]
- CSS Student Member [X/2]
- IEEE Student Member (non-CSS) [X/2+Y/2]
- Student non-Member [25-30% higher than X/2+Y/2]
- Life Member [X/2]
- Retiree [X/2]

Since current CSS membership fees are \$25, the proposal is to set Y=\$30. This will be implemented for CCTA'21 and CDC'21. This fee structure is meant as a suggestion useful for the conference organizers.

M. Krstic pointed out that most, but not all, retirees are doing well financially and asked whether retiree fees could be reduced further. Giua said he will pass the information to

future GCs and try to get data on retiree registration from previous conferences. He mentioned that this could be supported as a CSS initiative through the CSS fund. Braatz asked whether PaperPlaza can check if somebody is an IEEE member and Annaswamy answered that this capability is in fact being worked out. How suggested increasing the value of Y and decreasing the registration fees for students.

Control Forum

Alleyne updated BoG on the efforts to set up a Control Forum. A. Chakrabarty and A. Taha have examined options for implementation with Conference Catalysts (CC) and the leading option now is <https://flarum.org>. CC identified a rough time budget of 40 hours for the build and deployment with a total cost of \$6K, which ExCom approved. Alleyne mentioned that the forum will offer opportunities to disperse and make known good stories coming out of the CSS Fund in addition to other other roles to build the broader control community. The forum will also offer an ideal platform for YP activities, where you can submit and download code, etc.

Appointed BoG Members

Bitmead explained that, as part of the transition to the two-year presidency, it was the responsibility of the Nominating Committee this year to appoint 3 members to BoG for a 2-year term and another 3 members for a 1-year term. In considering candidates, the Nominating Committee sought to identify a broad array of people from academe, industry, government with diversity in gender and geography. The IEEE CSS BOG members appointed for a two-year term from 1 January 2021 to 31 December 2022 are:

- Sonja Glavaski-Radovanovic
- Alexandre Sanfelici Bazanella
- Hiroshi Ito

The IEEE CSS BOG members appointed for a one-year term from 1 January 2021 to 31 December 2021 are:

- Qing-Shan (Samuel) Jia
- Alberto Speranzon
- Carla Seatzu

BoG acknowledged the diversity of this pool of appointments. Annaswamy pointed out that nominations for election of BoG members will soon be coming up and that this is an opportunity to promote D&I.

Control for Societal-Scale Challenges Workshop

Annaswamy described plans for an outreach workshop on "Control for Societal-Scale Challenges: Future Directions" organized by G. Pappas, K. Johansson, and herself. The workshop will be conducted in two parts, virtual first during June 4-5, 2021 and in-person next in June 2022 in Stockholm. Six panel topics have already been identified. Details are still being worked out regarding participation and presentations as well as online format. The workshop deliverable is to identify new and emerging directions in control theory and technology with a forward-looking goal of investigating societal imperatives on a global scale.

Cortes commented that the two-stage process for holding the workshop might actually work

in our favor by providing an opportunity to refine and solidify the discussion.

Activity Reports

BoG members were referred to the material contained in the main agenda and reports document for full details on all activity reports. The following VPs gave short snapshots of relevant items in their reports.

Report from VP-TA

Hespanha presented the current status of TC Student prizes. The trial-run is starting with CDC'20 papers, and 3 TCs will be giving out prizes (Hybrid Systems + Discrete-Event Systems jointly; Health and Medical Systems + Systems and Synthetic Biology jointly; and Distributed Parameter Systems). Other TCs are scheduled to start in the near future.

Hespanha also described plans for the creation of a CSS Day inspired by PES Day and the Global Outreach Initiative. PES day attracted 51K people participating in 500 events in its 2020 (virtual) edition. CSS Day would be a way of further enhancing the value proposition for our membership, improving CSS visibility and diversity. The plan is to set a day in October 2021, with oversight being provided by the President, VP-TA, and VP-MA. The game plan is to start modestly in size, contacting TC chairs to line up (global/online and/or regional) events and Student Chapters to line up regional events.

Report from VP-FA

Sun presented a summary of the financial status of CSS. The society net worth is \$14.4M. Regarding the 2020 budget, as of November 20, 2020, our revenue is \$2,742.3k (vs. \$3,103.2k budgeted), the expense is \$1,864.2k (vs. \$3,097.9k budgeted), for a surplus of surplus \$878.1k (vs. \$5.3k budgeted). CSS is doing very well financially, despite the pandemic. We took a hit on conference revenue, but saved a lot because of the elimination of food and beverage costs. Finally, the 2021 budget has been finalized and is pending the IEEE Board of Directors' approval.

Report from VP-CA

Giua stated that there was concern the covid emergency would hit hard on our conferences' finances, but everything turned out much better than expected because costs went down significantly, resulting in larger surplus. We reduced conference fees because of the virtual format, expecting to increase attendance. CDC 2020 has had a record number of people attending workshops. Overall, this was a year of experimentation. Regarding the format of CCTA'21 and CDC'21, no decision has been taken yet. The hybrid format is the one that puts more strain in making the conferences financially viable. We have seen that going virtual is a good way to attract students.

Annaswamy then invited Abramovitch to describe his ideas for developing different modes of hosting conference workshops. Abramovitch emphasized that workshops in virtual format are a powerful tool for outreach, having resulted in doubling registration numbers. The goal is to make this possible without impacting the in-person experience. ACC'21 will most likely be virtual, but for ACC 2022, the plan is to have an option that, in addition to the regular workshop at the conference, will permit organizers to host it two weeks before the conference via zoom. Full-day workshops would be split in two 4-hour sessions to enable global participation. Moving the virtual format before the conference means that there is no requirement for internet live streaming, cameras, and other equipment at the hotel, resulting in significant savings.

Other Business

Annaswamy remarked that at the end of the in-person meeting is when we would normally recognize outgoing BoG members and other colleagues, but given the virtual format, everybody had already received their certificates of appreciation in the mail. She also reminded BoG that the CSS award ceremony at CDC'20 was being held virtually. The video production of the ceremony was entasked to IEEE.tv. Cortes showed a sneak peek with a few selected moments which was positively received. Annaswamy concluded with remarks about her tenure, completed and pending tasks, the challenges posed by the pandemic, and how the society was able to navigate them successfully.

Annaswamy asked if there was any additional new business or old business, and hearing no response adjourned the meeting.

The next BoG meeting will take place in association with ACC2021, pandemic-permitting, on Tuesday, May 25, 2021 at the Hiltons New Orleans Riverside Hotel, New Orleans, Louisiana, USA.

The meeting was adjourned at 5:45pm (UTC time).