THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Baltimore Section

October Executive Committee Meeting Report 12 October 2015

This report summarizes the proceedings of the IEEE Baltimore Section Executive Committee (ExCom) meeting held on Monday, 12 October 2015 at the National Electronics Museum (NEM, http://www.nationalelectronicsmuseum.org), Linthicum, MD.

1. CALL TO ORDER (@6:40 pm)

2. INTRODUCTIONS

3. APPROVAL OF PRIOR EXCOM MINUTES

Minutes will be approved at the November meeting

4. Executive Reports

- o Chair
 - Dave Kisak sent out an email about next year's slate. Right now there is not a full slate. There are people running for treasurer and secretary, but not vice-chair and chair. Anyone else who is interested in running can contact Dave.
 - Adam Parks sent an email asking that we give him \$1000 for an event. Matt will discuss this with Adam.
 - The Engineers Club requested payment for the annual dues. Matt will look into this and write them a check.

o Vice Chair

- There is a Naval Academy student branch event on October 16 for IEEE day. They are talking to students about IEEE and trying to get more people involved. Christopher Panuski would like \$150 to get coffee and donuts for about 60 attendees. Rob made a motion to give the Naval Academy student chapter \$150 for the event. Carole seconded the motion. Carole said this would be a good PACE event. All voted in favor of the motion. The motion passed. Baltimore will split the funding 50-50 with PACE. Rob will send Chris a note to let him know that we will fund the event.
- Vinod has a list of all of the societies with concentration banking accounts.
 These are AP/MTT, ED/SSC, IAS (2 accounts), IPS, and PES.
- The NEM is requesting that IEEE chapters pay \$600 to reserve rooms for meetings. Rob will follow up with them to find out what their costs are and how often IEEE is meeting at the NEM. Baltimore IEEE uses it at least 12 times for Ex Com meetings, a few times a year for continuing education meetings, and several times for other society meetings. The section paid

- several thousand dollars last year to cover previous years, and the section is due for another contribution. Vinod will invite Mike Simmons to the next ex com meeting to present the check to him. The section has historically paid \$1000 per year, but has also donated a projector and other items. Vinod suggested increasing it to \$1500 but Matt will need to evaluate the financial situation first.
- O Rob made a motion to donate \$1000 to the National Electronics Museum. Matt seconded the motion. Discussion Carole wants to change it to \$1500 and commit to paying it every year. There is sufficient funding in the bank account and IEEE receives more than \$1500 worth of benefit from it. It should be a line item in the budget every year. Rob amended the motion to donate \$1500 to the National Electronics Museum. Discussion This is an operating expense and not a donation. Rob amended the motion to contribute \$1500 to the National Electronics Museum as an operating expense to be presented to Mike Simmons at the November meeting. Neville suggested requesting that Mike bill us for this amount, but did not amend the motion. Matt seconded the motion. All voted in favor of the motion. The motion passed.

Treasurer –

- Matt went through the treasurer information from Vinod. Several expenses and deposits from earlier this year are missing documentation and receipts.
 Vinod may have more information and will go through old emails and find it.
- Carole has one expense from last year for \$465.
- There was a \$4400 deposit from February of this year that may be from IEEE-USA. Matt will follow up with Emilio to verify the deposit.
- There was a credit for \$100 from AES chapter operational funding. This is from their society and can be applied against their budget.
- o All reimbursements that have been submitted have been paid.
- Three Robot Challenge expenses were discussed. Matt received a bill from the Baltimore Museum of Industry for \$2000 and paid it. There were two fees for the Engineering Society of Baltimore (Engineers Club). One is membership dues and one is a donation to the Engineers Week program (\$500). They used to send the invoice in July. Dues are now \$406 including a late fee of \$6. Matt just received the bill and will pay it.
- Vinod received one request for funding for a construction project at the Engineers Club.
- The section has not received a request for the Engineers Week program, but this is usually later in the year. Last year the Engineers Club invoiced \$1100 December for the IEEE Day event last October 6.
- Secretary Rachel will bring the June and October minutes to the next meeting

5. Committee Reports

- o Robot Challenge
 - Southern New Jersey and Coastal New Jersey are running a similar robot challenge and is using about 30-40 kits per year.

- o Orders are in place for 170 kits coming in monthly shipments.
- o Some kits were bought back from MESA a few weeks ago. IEEE paid 70 cents per dollar for the automated kits and 50 cents for the regular kits.
- College boards require 2 years for students taking AP Physics. This takes curriculum time from students who would have signed up for robot projects. Of 4 schools polled, 2 have problems with it and 2 don't. This may impact the event next year.
- Training sessions for teachers and mentors will be held on November 19 and in January.
- The Robot Challenge will be April 16-17 2016. There will be two new options for replacing the wood block with a 3D printed block and using automation with closed loop controllers. There will be a special award for reducing the run time and enhancing scores.
- Neville will be giving a presentation on Friday to tech ed teachers in the Baltimore area. MAST (STEM teachers) TEAM (tech ed). There will be a separate session at Catholic High School for more teachers to try to increase attendance.
- With the automation boards from MESA, there is a stock of 2 leg boards. NJ may take a lot of 4 leg boards so they will order more. They will be requesting \$3000 to be split with PACE.
- Carole said PACE may run out of money before the end of the year, so the request needs to be submitted as soon as possible.

PACE

• There is an upcoming STEM career fair for girls at Bryn Mawr School on November 14. Rob, Matt, and Rachel approved a \$500 donation from the section for the event through email on October 6. The region will transfer an additional \$500 after completion of the event and submission of a final report. IEEE is a gold sponsor, which includes IEEE logos on bags, a banner, and the website. Carole requested a half page ad from IEEE. The section is sending three volunteers. Neville will take pictures for Region 2 newsletter.

GlobeComm 2015

O Carole Carey and Anna Romaniuk are part of the GlobeComm 2016 planning committee. Carole's role is professional development, patronage, and participating in an industry forum. Anna is in charge of exhibits. The conference will be in San Diego December 6-10. GlobeComm will cover Carole's \$1000 registration but they will need funding from the section for travel and hotel. About \$2200 per person from Baltimore including food, incidentals, airfare, and hotel. Carole and Anna are going to the 2015 event for the planning committee meeting.

GlobeComm 2016

 The GlobeComm 2016 event will take place in December 2016 at the Washington, DC Hilton. They need student volunteers who will receive a reduced rate or other incentive. They also need a volunteer

- coordinator. This event typically makes money for the section, but they are not requesting funding yet.
- Carole requested \$2300 per person for the 2016 GlobeComm planning meeting at the 2015 GlobeComm conference. Neville made a motion to fund Carole to go to the GlobeComm 2015 December 6-10 for \$2300. Rob seconded the motion. Discussion Jeff mentioned that for 2 people that is a lot of money and we have a lot of outstanding bills. Vinod said this is basically a down payment for money we will get next year. One person is required. When Jeff was working for GlobeComm, they covered a lot of his expenses. This year the planning group made the decisions about what they would cover. Anna is looking into other sources of funding such as the Communications Society or employer. Matt said the section does have some money, but has spent more than it brought in this year. Jeff said sending one person from the section is more than enough since Washington and NoVA are also sending people and we don't have a lot of money. There is a lot of experience in the group hosting conferences.
- Everyone voted in favor of the motion and the motion passed.

Continuing Education

- Boris is looking for people to discuss the Internet of Things (IOT), Zigbee, or a related topic at a future continuing education meeting. It will be a 4 hour course at whatever time of year the speaker is available. Ryan will add it to the newsletter.
- o Bob suggested a topic of drones.
- Any other suggestion should be sent to Boris. They should be detailed 4 hour multidisciplinary courses that can cross chapters.
- o Rob suggested adaptive radar and knows of a speaker.

EMC Society

- There is a joint EMC/ Signal Processing meeting on October 16.
- Michael Hoffman, who is certified in EMC may be interested in a joint meeting with PES and EMC.
- o 8 people signed up for the October 16 meeting, which will also be sent to more people.
- There is a WIE conference in Philadelphia November 6-8 at the Sheraton. Bob will be there and can help or attend. Kate will work out the details with him.
- INCOSE has a women in system engineering group. There is an INCOSE meeting about human factors at APL on 11/21 at the main building.

o WIE

- The WIE summit is the first weekend in November. The section approved \$500 at the June meeting. If anyone from Baltimore would like to go, they should contact Kate for possible reduced registration. Kate requested \$500 for travel and expenses from Region 2 and the Baltimore section. Kate made a motion for \$250 from Baltimore section to cover her expenses. Collin seconded. There was no discussion. All were in favor of the motion and the motion passed.
- Hacker Space

- Michael Hammond discussed Hacker Space in Baltimore. They offer classes and have facilities and knowledge to help people with projects. They are a 501(C)(3) community workshop and provide tools and equipment for people who use the space. This includes woodworking, a laser cutter, 3D printers, etc. They try to help people who have an idea or a passion for something that don't have the full abilities or equipment. They request no money during open hack nights but offer membership options for others to use it regularly. They also host classes whenever possible, but run into funding issues when instructors need to buy materials. They are looking for collaboration with other organizations. They are not set up for student groups due to safety issues with tools and exposed electronics in an open warehouse, but they would like to eventually move to a more suitable environment.
- They could possibly take the classes to schools if they had materials.
- They host a power racing series where they build one or more cars to race using a Power Wheels body and less than \$500.
- They are not requesting funding from IEEE at this time, but they could offer reduced or free membership in exchange for funding classes such as basic electronics class or basic soldering class. These may be good topics for the continuing education program. Vinod suggested advertising in next newsletter.
- The meeting adjourned at 8:33.

6. Attendees

- Rachel Krepps
- Joshua Harris
- Collin Krepps
- Robert Rencewicz
- Matthew Stryjewski
- Sherwood Olson
- Benand Menachey
- Michael Hammond
- Vinod Mishra
- o Kate Duncan
- o Jeff Friedhoffer
- Carole Carey
- Bob Berkovits
- Boris Gramatikov
- Neville Jacobs
- Jay Gamerman

Attachments

Status, Student Activities, 10-12-15

- 1. After totally wiping out our kits inventory last year, we now have 57 robot kits, 16 2-leg Automation boards and 5 4-leg automation boards, and have started to receive requests from schools and New Jersey. We have orders in place for an additional 170 kits. We may need to order some additional automation 4-leg boards.
- 2. Some of these kits were bought back from MESA at a discount, after we agreed to discontinue last year's involvement. This benefitted both MESA and ourselves, and will allow us to donate some kits in the event of hardship.
- 3. 3. As we mentioned at the last meeting, we are still concerned over the decision by College Boards to require 2 years for those students taking AP Physics. So far 2 schools have indicated this might affect the number of teams they will be registering.
- 4. The first training session will be conducted November 19 at the Baltimore Museum of Industry from 4 to 7 PM. That will be followed by a second session on January 30, and, of course, the Robot Challenge Event will be held April 16 and 17, 2016.
- 5. This year we will be offering two options: 1. Allowing the wood block to be built using a 3-D printer, and 2. Providing closed-loop feedback in addition to open-loop programming for our Automation controllers. We are adding the Challenge of determining which is the most effective option in reducing the Run time and enhancing the Performance Run scores.
- 6. I will be presenting a paper at the MAST /TEEAM conference at JHUAPL on Friday (10 /16) on the subject of Feedback Sensing Making Robots Smart; and hoping it may bring in some new schools.
- 7. Expenses this month were for the 40 kits from Kelvin (\$2017.40), and the 33 kits from MESA (\$2273). My expenses were (\$257.28).

Neville Jacobs