Computer Science Advisory Board Minutes
Friday, May 17, 2019

Present: Leslie Aaronson (K-12 Initiatives at NCWIT), Edwin Ambrosio, Jon Atkinson (Internet Brands), Edwin Ambrosio, Daniela Beltran, Carl Broderick, Adrian Delgado, Adriana Estrada, Julie Flapan (UCLA), Massoud Ghyam, Arturo Hernandez (MESA/STEM), Kevin Judge (John Deere), Nicolai Kalisch, Mary Kelly (Student Rep), Dr. Maloney, Victor Matos, Mitch Middler, Thong Nguyen (Internet Brands), Solomon Russell, Dr. Shankweiler, Jacquelyn Sims, Satish Singhal (via phone), Dave Smallberg (UCLA), Jon Wada (Raytheon)

REVIEW MINUTES

The November 2, 2018 CS Advisory minutes were reviewed. M. Ghyam motioned to approve the minutes. E. Ambrosio seconded the motion. All were in favor to approve of the minutes.

NASA PRESENTATION (E. Ambrosio)

E. Ambrosio discussed ECC's participation in the NASA competition.

He was approached by ECC students to participate in a NASA MUREP (Minority University Research and Education Project) Innovation and Tech Transfer Idea Competition (MITTIC). MUREP provides financial assistance to minority serving institutions. They assist faculty and students with research to provide STEM engagement. Moreover, they want to create a diverse workforce at NASA Centers.

E. Ambrosio's students submitted a concept paper to NASA and after it was approved, the group went on to give a "space tank" presentation. The group pitched the idea for portable wireless access points. Their vision was to have free municipal Wi-Fi for underserved communities.

E. Ambrosio's group won the competition and were given permission to apply for a small business grant to form a startup company. The group is currently working on marketing, small business grants and business partnerships.

L. Anderson recommended sharing this amazing news with policy makers city and statewide.

A. Estrada discussed funding to support the team through the Strong Workforce Program.

STRONG WORKFORCE

Adriana Estrada and Adrian Delgado discussed the Strong Workforce Program. The goal of the program is to diversify the type of certificates offered, increase the number of students in certificate programs and place students in employment after obtaining their certificate.

The Strong Workforce Program will be launching a job board called Warrior Tools. Our partners will have an opportunity to post jobs and competition opportunities on this site.

They also plan to become more mobile by using a utility cart with laptops so they can go directly to students. This program has the ability to make programs stronger in terms of tools and resources through funding.

A.Hernandez discussed the desire for students to have completed 1-2 internships before they transfer. He also discussed that it would be beneficial to have a digital media presence where student success stories can be shared.

COMPUTER CARTS UPDATE (HP, MACS AND CHROMEBOOKS)

The CS department received funding through the CTEA grant to purchase a mobile HP laptop cart. Because of this cart, we can offer more classes.

The department also has a MacBook laptop cart. S. Singhal discussed the plan to use these carts in the future when we offer a Swift programming class.

NSF COMPUTER SCIENCE COHORT GRANT (Daniela Beltran and Massoud Ghyam)

D. Beltran established a cohort of students at ECC and CSUDH through the NSF grant. Each cohort of students will move forward together through all of their courses. Students will not take summer courses because the goal is for them to do internships during that time.

D. Beltran discussed the factors that prohibit students from graduating and obtaining their degree, including preparedness, academic support, and lack of financial support. The NSF grant aims to address these obstacles.

Google has a training program called CSSI, which gives students a taste of programming and its applications.

The NSF Program also has a Math prep boot camp that students will take before the semester begins.

Contact D. Beltran if you know of students that are interested in this program.

J. Flapan recommended reaching out to CS teachers and a CS Teachers Association so they can share more about the program. She also recommended presenting at CS AP classes.

HIGH SCHOOL REQUESTS/DUAL ENROLLMENT

V. Matos taught a CS course at Redondo Union High School. M. Middler will also be teaching a CS course there in fall 2019.

COMPUTER SCIENCE WEEK AND INCREASING FEMALE & UNDERREPRESENTED STUDENTS

Dean J. Sims discussed being more intentional about planning a CS week each year. She will work with student groups on this. Because this is a high priority for the department, we will create a targeted committee starting in the fall on this imitative.

GROWTH OF CS

AB705 is a statewide bill that allows students to take classes directly at the transfer level. Before this bill, many students would place in classes below transfer level and would then get stuck in this pipeline and give up before completing their math requirement for transfer or certificate. Dean J. Sims views this as a contributing factor to the growth of CS. The CS department needs more faculty to keep up with this demand.

COMPUTER SCIENCE TUTORING

Mary Kelly discussed her experiences as a classroom tutor. She works in the Math Study Center and facilitates study groups. During the 2015-2016 academic year, there were 96 total visits for CS tutoring, but that number more than doubled the following year with 242 students. During this current semester, we have already surpassed that number.

A.Hernandez discussed that the MESA Center increased from 7% to 18% in the last two years with a major concentration in CS.

CURRICULUM

S. Russell discussed the development of a new course for teachers to teach Computer Science Principles. The CS department hosts a weeklong course during the summer for teachers teaching the Beauty and Joy of Computing (BJC).

M. Ghyam discussed a new course proposal, Cloud Computing. It is currently in the beginning stages as faculty decide what approach to take.

Ethics, Cybersecurity and Data Science are the three fastest growing areas of CS. The CS department would like to develop a Data Science course.

ACM CHAPTER

S. Singhal discussed the latest ACM events. There was a programming contest at ECC. ECC students also went to Hackathon.

ACM has a speakers program where they invite guest speakers to talk to students on a variety of topics.

Mary Kelly's vision for ACM is to try to foster more of a community among CS students and connect them with available resources.