# Industry Advisory Board (IAB)

# Meeting Minutes

October 23rd, 2020

1. Call to order (Dr. Amini)

Dr. Amini called to order the annual meeting of the IAB meeting at 9:00 AM on October 23rd, 2020, through a remote online session.

1. Welcome and Program Overview (Dr. Kang)

* New faculty gave a brief introduction of themselves.
* Dr. Kang gave an overview of the undergraduate and graduate curriculum.

1. ABET Program overview (Dr. Sun & Dr. Kang)

* Dr. Sun gave a brief background of the ABET program for the new IAB member.
* Dr. Sun presented an ABET program educational objectives and revised new student outcomes.
* Dr. Sun presented the changes made to comply with the ABET program requirements.
* Dr. Kang presented how the department meets ABET requirements in the current BS CS curriculum.
* Dr. Kang presented the lower division required courses, the upper division required courses, electives, and required courses flow chart.
* Dr. Kang presented a wide range of CS elective courses.
* Dr. Kang presented the CS curriculum changes based on the new ABET guidelines in fall 2021.

1. Senior Design Capstone Project (Dr. Kang)

* Dr. Kang gave an overview of the CS4961-CS4962 Senior Design Capstone Project.
* Dr. Kang presented the benefits of the Senior Design Capstone Project.

1. MS Program Curriculum (Dr. Pamula)

* Dr. Pamula gave an overview of the breadth requirements and two graduation options: A thesis option and a Comprehensive exam option.
* Dr. Pamula presented the new MS curriculum. The new curriculum developed to encourage master’s students to take a thesis option over a comprehensive exam option.
* Dr. Pamula presented the department’s MS Program Student Outcomes.
* Dr. Pamula presented an MS Program assessment process plan.

1. Department Highlights (Dr. Pamula)

* The number of students has increased. Every year, we have over 200+ incoming students and over 100+ transfer students.
* The graduate program has taken slightly deep, mainly due to the international student not being able to obtain entry to the US.
* The number of faculty also has increased. Now, we have 14 full-time faculty.
* The School embarked Graduation Initiative, and the department improved graduation rates.
* Dr. Pamula presented many faculty activities, including curriculum development, obtaining grants, student capstone projects, and supervising graduate students besides teaching responsibility.

1. Introduction of IAB members (Dr. Amini)

* Dr. Amini lead the introduction time.
* Dean Allen joined the meeting and gave greetings
* IAB team members gave a brief introduction of themselves.

1. Adjustments due to COVID-19 (Dr. Kang)

* Fact-to-fact teaching has converted to remote-teaching.
* For remote teaching, instructors utilize various tools, including Canva, CSNS, Zoom, YouTube, and Camtasia.

1. IAB Discussion (Dr. Amini lead)

* Stacy O’Malley – Emphasized the importance of AI and data science. Honeywell pushes very hard on AI and data science. All interns and new hires in Honeywell are mainly from AI and data science field. Honeywell HR looks for a student with data science and math skills. Students should become aware of the importance of AI and data science in the industry.
* Dr. Pourhomayoun – several data science courses have developed and taught. The data science courses are one of the most popular courses among students. Although the CS4660 Data Science course is an elective course, more than 100 students enroll in the class. We are in the process of developing a lower-level GE course in the data science area, where anyone in university can take.
* Dr. Kang – the department is planning on developing a data science certificate program. Need more industry feedback to find out what would be the best approach.
* Dr. Pamula – requested Stacy to send us some guidelines on developing AI and data science courses.
* Ted – mentioned that we need to pay attention to detail. One example was the salary analysis of his department. Due to simple duplicated data entry, the final results were way-off from reality. Ted mentioned that one should understand the business first. Then, analyze data using data science. To validate the results, one should cross-check the accuracy of the products.
* Dr. Amini – gave an overview of data visualization. Data visualization can effectively identify anomaly and outliers.
* Jake – As the dataset size gets larger, a small error becomes very difficult to detect and correct. Attention to detail and testing methodologies are critical in data science.
* John Tran – Mentioned community outreach, contributing to our community, volunteering community service.
* Stacy and Jake – mentioned the importance of unit testing.
* Ted – Reach out to elementary and junior high students with toolkit ideas or care package ideas that the teacher can use.
* Dr. Amini – brought up the idea of using educational video games for elementary and junior high students to reach out.
* Keenan – suggested teaching unit testing in CS2011, CS2012, and CS2013.
* Dr. Paviz – asked who develop unit testing. Does the programmer write their unit testing program, or does someone else write the unit testing?
* Jake – In his work, the staff uses a various level of the testing program.

1. Senior Design Capstone Project (Dr. Amini)

* Presented the benefits of the program and the current senior design sponsors
* Solicited senior design sponsorship