PI TAU SIGMA ANNUAL CHAPTER REPORT

2016-2017

Carnegie Iota

A. Initiations

We only bring in a new recruitment class each fall semester. For our recruitment process, we began by inviting all juniors and seniors in the mechanical engineering department with a minimum grade point average of 3.5 to consider being a part of Pi Tau Sigma. We invited them to a social event to learn about the organization and how they can benefit from joining. We encouraged these students to send us their resumes in order to be considered an applicant to become a part of Pi Tau Sigma. We evaluated the resumes for leadership and community involvement, being that we stress those qualities in our members. Our advisor allowed us to take the lead in selecting to whom we extend membership. He checked the list we created once our decisions were made, and confirmed the list.

The initiation ceremony was held on October 30, 2016, and we had a total of seven new initiates. We celebrated with pizza as the new members were sworn in and presented with their pins. We also took a picture for the Mechanical Engineering Department records. This was a great time for the juniors to speak to the seniors about the remaining semesters the juniors have left in the mechanical engineering program. They were helpful giving advice for the upcoming classes and further ways to get involved outside of the classroom.

B. Chapter Activities

<u>September 16, 2016: Mechanical Engineering Graduate Lab Tour</u>

In collaboration with the Mechanical Engineering Graduate Student Organization at Carnegie Mellon, Pi Tau Sigma organized a tour of several of the graduate labs in the department. We wanted to encourage undergraduate students in the department to learn more about the opportunities to get involved in mechanical engineering outside of the classroom. The labs included: additive manufacturing, bio-inspired robotics, fuel cells, and nanoscale heat transport. At each lab, the graduate students had prepared a small lab tour followed by a brief question and answer session.

<u>September 19, 2016: Fall TOC Job Fair Mechanical Engineering Breakfast</u>

On the first morning of the Technical Opportunities Conference (TOC) at the university, representatives from many of the companies that are looking for interns from the mechanical engineering department come to network with any student from the department that would like to attend. Some of the companies represented includes Ford, Uber, Intel, Deloitte, Raytheon, in

addition to several more. This allows the students to get a head start on the rest of the job fair. By getting to meet with the representatives of those companies before the fair, that gives the students the time to meet with more companies than most students. We find this extremely effective in helping students find summer internships.

October 17, 2016: Potential Initiate Social

This was an event that was planned for the students that were invited to join Pi Tau Sigma to come meet with the current members and learn about the honor society. We went to a local restaurant for dinner, and we conversed about the benefits of membership. The deadline to apply for the honor society was a few days later this event, so it was stressed to apply.

November 16, 2016: Fall Get Real Panel

This was an event in the evening that brought four Carnegie Mellon University Mechanical Engineering alums to campus to speak on their positions and the companies at which they are employed. The companies represented were Alcoa, Bechtel Marine Propulsion Corporation, ANSYS, Inc., and Uber. They began by doing a brief introduction of themselves and their professional careers. Then, they opened the floor up for questions for the students to ask anything that they would like with regards to finding a job after graduation, having a professional career, work/life balance, etc. Once everyone finished asking questions, there was a small networking reception afterward for students to converse with the alums and ask any remaining questions that they may have had. This gives students another way to grow their networks in the mechanical engineering field to help with finding summer internship opportunities, as well as full-time positions.

November 17, 2016: South Fayette School District Science Fair

This was a service event in which we helped prepare and implement activities for the South Fayette School District Science Fair. We worked along side the CMU Future Leaders of Science to conduct the activities. The activities included: a demonstration of "regular" soda sinking and "diet" soda floating due to the sugar density; an experiment called "Elephant Toothpaste" showing the chemical reaction of hydrogen peroxide, dish soap, and potassium iodide; a fun hands-on activity for the students to do where they would use the heat created by the friction of twisting a wooden dowel to pierce the latex of a balloon, sticking the dowel through the balloon without it popping.

Our members also got the opportunity to walk around the science fair and ask the participants questions about their projects. The participants were first through sixth graders. This gave us a great opportunity to interact with the students and keep them interested about the STEM fields. High schoolers of the South Fayette School District also attended to show demonstrations from their physics classes. It gave us the opportunity to speak to them about majoring in mechanical engineering in college, a major many were hoping to pursue. We were also able to tell them about the great opportunities Carnegie Mellon has for a Mechanical Engineering program. With

Carnegie Mellon University being so close to their school district, many students, as well as parents, were interested in hearing about the program.

December 9, 2016: Board Elections

This meeting was to elect the new board members for the Spring 2017 and Fall 2017 semesters. There are four board positions consisting of President, Vice President, Treasurer, and Service Chair. The President main responsibilities are organizing meetings, as well as the job fair breakfasts. The Vice President is the leader in recruitment. The Treasurer keeps track of the budget, pays dues to National, and orders all food and items for events. The Service Chair organizes the community service events. The new board members all got to meet with the graduating person in their position to learn what is required of them.

February 7, 2017: Spring Encompass Job Fair Mechanical Engineering Breakfast

Similar to the Fall TOC Mechanical Engineering Breakfast, representatives from companies looking for Mechanical Engineering students for internship and/or full time jobs were invited to attend. Companies that attended were ANSYS, DJI Research, Google, Hewlett Packard Enterprise, IGT, Navy Officer Programs, Nucor, Pacific Northwest National Laboratory, Pitney Bowes, and Raytheon.

February 24-26, 2017: Pi Tau Sigma Convention at Drexel University

The 2017 Pi Tau Sigma Convention was held at Drexel University, Philadelphia; Carnegie Iota attendees were Natha Singhasaneh, the chapter President, and Isabel Roscoe, the chapter Service Chair. We participated in many great activities such as the Design Swarms Workshop and social events. It was such a great experience getting to meet other Mechanical Engineering students from all over the country, and to talk to get to learn about other chapters. We also had the chance to listen to very inspirational speakers.

March 23, 2017: Spring Get Real Panel

Similar to the Fall Get Real Panel, three Carnegie Mellon Alumni were invited to talk to students about their professional lives. The Panelists were Sean Kelly, an Engineer at Uber Technologies, Nany Ott, a Senior Technical Editor at Carnegie Mellon Software Engineering Institute, and Madhur Paharia, an Engineering Manager at Westinghouse Electric Co. We had a great turnout with over forty students.

May 17, 2017: Senior Dinner

We are in charge of organizing the Mechanical Engineering Senior Dinner every year with help from the department academic advisors. This event is during Senior Week, the week in between classes ending and graduation, so it is a great time for the students to have one last time all being together. We planned a fun event at Dave and Busters. In addition to dinner and playing games, the students also vote on favorite professors.