# Pi Tau Sigma Annual Chapter Report
# 2009-2010
# Illinois Alpha

## A. Initiations

### Selection and Recruitment Process

The Illinois Alpha chapter requires its initiates to have completed 60 or more credit hours for a bachelor's degree in Mechanical Engineering, while maintaining a GPA of 3.50 or higher on a 4.00 scale. At the beginning of each semester, the Mechanical Engineering department sends the candidates that meet the above requirements an invitation letter by email written by the current president of the society. The invitation explains what Pi Tau Sigma is and some of the events that our chapter has participated in. Additionally it invites the candidates to an introductory meeting where the initiation process is explained to them further. Recently our chapter has begun initiating graduate students in the department of Mechanical Engineering based on recommendations by current members.

### Initiation Requirements

First initiates are required to go to a short interview with some of the executive board and senior members. The purpose of this interview is not to determine whether the initiate is fit for initiation, but to get to know the initiate and to better place the initiate into project groups and with mentors. Recently, our chapter implemented a mentors program, pairing an initiate with a current member of the society. The initiate was required to attend a social lunch with their mentor in order for them to be better integrated in our society. A lifetime membership fee of $50 is required of initiates. Our chapter wants our new initiates to get used to participating in the society; therefore, we require a high level of involvement for initiation. Therefore a points system was created, that requires initiates to receive a certain number of points before they can initiate. Initiates can earn points by attending general meetings, participating in social events, volunteering at service events, and by being involved in a project. A certain minimum of points is required for each category, but there is a fair amount of flexibility for the total point requirement. Graduate students wishing to initiate are subject to all of these requirements, except their research takes the place of the project involvement requirement.

### Initiation Ceremony

Our initiation occurs typically two weeks before the end of each semester. This past year, initiations were held on December 3, 2009 and April 29, 2010. We consider initiation to be a formal affair, and all in attendance are required to wear business formal. Initiates are led into a dimly lit room and are told to stand at the front before the current members. Executive board leaders read the initiates the standards and ethics that Pi Tau Sigma works to uphold. Initiates are individually asked if they will uphold these standards when members of Pi Tau Sigma. Initiates are also introduced to the Pi Tau Sigma emblem and coat of arms. Finally initiate names are read, and they receive a certificate and are pinned with the Pi Tau Sigma pin. Initiates are also taught the secret handshake and given a t-shirt. After the ceremony, a catered reception is held for the new and old members.

**Our active members after initiation in Spring 2010**

## B. Chapter Activities

### Social Events

Tailgates: We had two tailgates for home football games. We used the societies grill to make hotdogs and brats for our members. We also played games of bags before heading to the football game.

Happy Hours: Every couple of weeks PTS would host a happy hour at a local bar for the members. Free appetizers were served and it was a nice way to kick off the weekend while supporting socialization between members.

White Sox Game: We had about 10 members carpool up to Chicago for a White Sox Game. PTS partially subsidized the cost of the tickets.

Paintball trip: About 15 members and initiates of our chapter went on a paintball trip on one Saturday. PTS partially subsidized the cost of equipment rental.

**PTS Paintball Outing**

Bowling at the Union: Once each semester, PTS went bowling at the student union. Each time, members played two games. This event took place immediately following general meetings, so there was a quite high turnout.

Bar Crawl: PTS organized a barcrawl for its members where we travel to several different local bars on campus including a place to get food. This event is always well received by members.

Potluck Dinner: Held at an executive officers apartment, members brought different dishes for a social get-together.

Illini Hockey Game: Members and initiates went together for an Illini Hockey game. The game was enjoyed by all in attendance.

Football Viewing at an Apartment: We watched a Chicago Bears game at an officers apartment and ordered pizza to snack on.

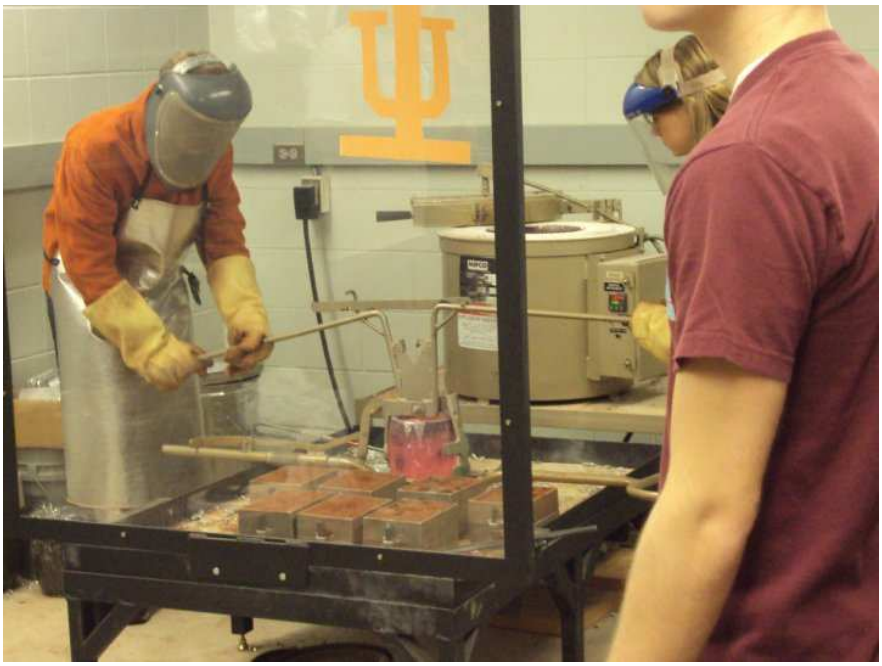
March Madness Bracket: Our society sponsored a bracket competition for members and initiates. The winner won bragging rights.

E-Week Participation: The engineering council at our university, which most engineering societies are a part of, hosted E-Week, where the different engineering societies compete against each other in various activities. Ranging from Mario Kart to eating contests, we had good participation from our society.

Broomball: PTS arranged a broomball game with its own members and initiates. Broomball is a game played on ice rink, wearing regular shoes, and the object is to shoot a ball into a hockey net.

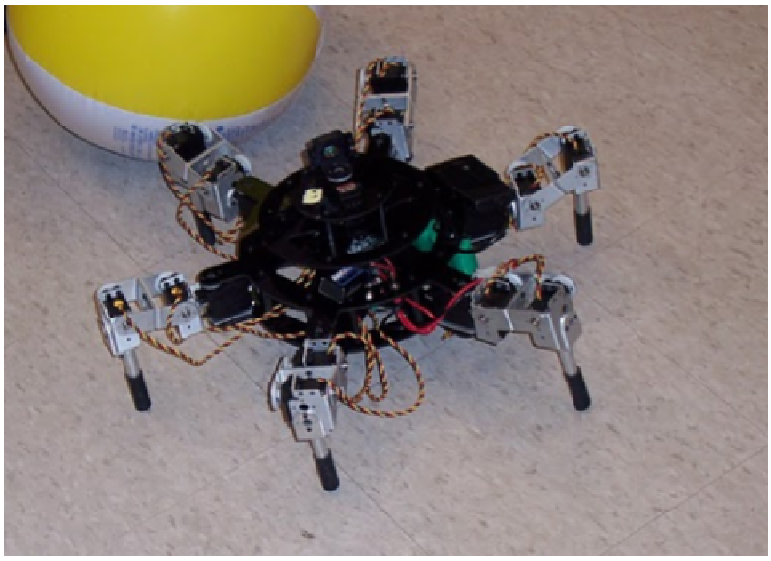
**Projects**

EOH Sandcasting Exhibit: Each year the engineering campus puts on a two day Engineering Open House for the general public. EOH consists of a few hundred exhibits put on by all different engineering societies, individuals, or companies. Our chapter sponsors a sandcasting exhibit, where we teach people about the process of sandcasting using a hands on approach. Guests are invited to pack sand molds, and then we pour molten aluminum into them, creating little cast cars that the guests can keep. This exhibit is completely run by volunteers from our society and is well liked by both guests and volunteers.



**Pouring of the molten aluminum into sand molds**

EOH Hexapod Exhibit: The second EOH exhibit that our chapter runs is a hexapod exhibit. The hexapods are six-legged robots that can be controlled using a play-station controller. Our society has built an obstacle course ramp where two people can compete head to head. The first to make his robot complete the obstacle course wins. This exhibit is really fun, but it also gives guests some experience with working with robots.



**Picture of hexapod robot**

**Hexapod obstacle course**

Robot team: For the first time this year, PTS put together a robot team to compete in the Jerry Sanders Robotics competition at EOH. The team had to completely build a robot from scratch to be able to complete a certain task. Robots were judged on how well and fast they could complete the tasks. For our first showing at this competition, we did very well, and the project was well liked by the members and initiates that participated in it.

## Service

Annual MechSE Forum: For the second year in a row, PTS has sponsored an open forum for the mechanical engineering department at our university. Several deans of the department were on a panel where students and other faculty members could ask

questions. Our chapter believes this is an invaluable opportunity to open discussion between students and faculty and looks forward to hosting this event each year.

High School Outreach: Our society put together a presentation about engineering that we present to different high school classes. The presentation includes some interactive demos along with information about engineering degrees and the University of Illinois. It is a really fun and rewarding experience for those who volunteer, and it is also helpful to the students who may be considering pursuing engineering.

Tutoring: PTS offered a weekly tutoring service specifically for mechanical engineering majors. Being an honors society, it is good to share our knowledge with those who could use a little extra help.

BBQ fundraisers: Each semester, PTS hosts a two day BBQ fundraiser where we grill hotdogs, brats, and hamburgers on the quad and sell them to raise money for Marklund Home for children with special needs. This event is very popular and is usually successful at raising about $400 from each BBQ. Also member enjoy volunteering for this event.

Za's Fundraiser: Another fundraiser organized for American Cancer Society's Relay for Life was with Za's, a restaurant on campus. By distributing a special coupon, Za's would donate a portion of the cost for meals to our cause.

Krispy Kreme Fundraiser: PTS also hosted a Krispy Kreme fundraiser for Relay for Life. We sold fundraiser boxes of donuts to people in one of the popular engineering buildings. Members and initiates staffed this event.

Pizza Fundraiser: We sold slices of pizza on the quad that we had purchased at a discount to raise money for Relay for Life. Again, this event was staffed by PTS members and initiates.

Raffle: PTS hosted a 50/50 raffle to raise money for Relay for Life. We sold tickets to both members and the general public over a period of a couple weeks.

Relay for Life: Many members participated in Relay for Life at our campus. PTS created a team where people stayed up all night to support the fight against cancer. Additionally, PTS had a bake sale during Relay, to raise more money. We were able to donate over $1,000 to the American Cancer Society.

**Chapter Business**

General Meetings: Our society tries to incorporate various speakers at our general meetings. We invite corporations, professors, or societies to come and speak. This not only keeps our members up to date on current research and technology in our field, but it also helps us build connections for possible future opportunities. This year we had companies such as Exxon Mobil and Anheuser Busch come in to speak. We also had a representative for Tech for Poor come in to speak with us about how we could use our

engineering skills applied to some simple technology to help people in less fortunate regions of the world. Additionally we had a pair of graduate students come in to talk to us about their research in creating prosthetic legs. Having a wide variety of speakers at our general meetings shows our members and initiates all the possibilities we have has mechanical engineers, and helps foster interest in the field. There is usually a very good turn out at our general meetings.

Nationals: The Illinois Alpha Chapter had five people travel down to the national convention at Texas Tech. This was a very valuable experience for our chapter since a lot of good ideas were brought back from the convention.

Officer and Committee Meetings: Our chapter has a weekly officer meeting were the executive officers come together to plan general meetings and manage society business. Additionally there is a committee chair meeting that is also held weekly where members of the service and social committees meet with the vice president to go over future events.