

PSPE Philadelphia K-12 Outreach / Discover E Sponsors Robotics Tour

Philadelphia's Pennsylvania Society of Professional Engineers (PSPE) capped off the year with an exciting tour of the [University of Pennsylvania's GRASP](#) lab. The event attracted children of varying ages, along with leaders in several K-12 STEM outreach programs.

I discovered GRASP while looking for STEM projects to busy my oldest son and his friends. I fell upon a very popular and intriguing video on [Youtube.com](#) showing little UAVs (unmanned air vehicles) performing miraculous stunts with incredible accuracy.

These devices are being developed at the University of Pennsylvania's GRASP (General Robotics Automation Sensing and Perception Laboratory), located in Levine Hall at the College of Engineering and Applied Science.

I quickly reached out to good a friend at the University to see if my son and I could get a live glimpse at these machines. I was directed to Rebecca Stein who allowed me to invite other parties of interest to her site.

The response to the tour allowed an extremely diverse crowd, of 20 attendees, to meet and exchange STEM outreach ideologies and resources. There were mentors and students from the [Dawgma 1712 Robotics](#) team of Lower Merion High School, mentors from Springfield, PA FLL (FIRST Lego League), [MOCCA](#), and parents and family members of children interested in STEM fields.

Rebecca told us GRASP holds one of the world's top concentration of intellectual capital in STEM graduate and PhD candidates. Our first stop was the quadrotor (four propellers) lab where a student explained how the quadrotors are not remote control, but operates using a unique set of computer programs. He allowed the quadrotor to hover - then pulled it off its fixed location. He then released it and the quadrotor returned to its original hover position. He also showed a video of the [quadrotors working as a team to transport beams and build a large structure](#).

Our group was next introduced to the [Humanoid Soccer Robots](#). These little guys actually [move up and down](#) a small soccer field and [compete for goals](#). Rebecca showed videos of the robot teams in action and activated a soccer dog for show-and-tell.

We ended the night discussing the highlights of the tour and giving short presentations of our individual resources over a delicious meal sponsored by PSPE's K-12 Outreach / Discover E committee. The youth were amazed by the state-of-the-art technologies and thankful for the opportunity to visit major college campus.

PSPE is dedicated to inspire our youth to STEM careers.

**Special thanks to Rebecca Stein – what a great host and professional.*