

## Computer Engineering Final Projects

Students in Computer Engineering courses (TEJ2O, TEJ3M, and TEJ4M) design and build final projects of their choice. Youthful energy, piles of cool gear, on-call consulting, and a big whiteboard combine to make great things happen. - Mr. Alex Matan



### Advanced Manufacturing - Delta Robot

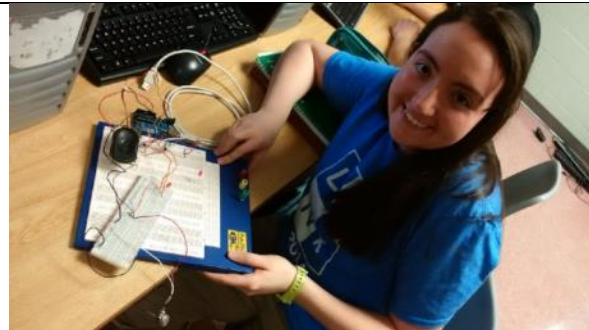
Dominic Faryna demonstrates the motor controller for the delta robot 3-D printer he is building.



### Biomedical - Navigational Aid for Visual-Spatial Disabilities

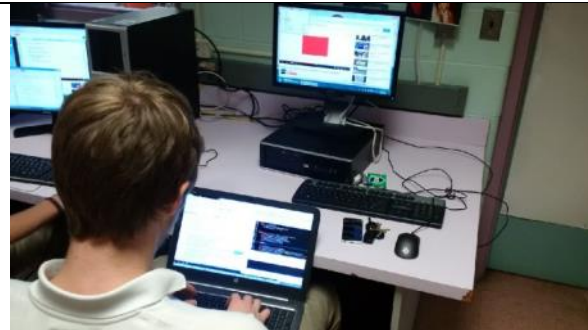
In order to prevent falls and reduce caregiver demand, Amanda Logiudice and Caitlin Idziak are combining an ultrasound rangefinder, electronic compass, wireless links, and MP3 player to give verbal directions to

aid in navigating a bathroom.



### Biomedical - Heart Rate Monitor

Maria Valencia is working on the signal conditioning and processing needed to use human heart rates as an input into other systems.



### Entrepreneurship – Musclear

Kyle Jensen is working on the code for his start-up company using a modern web development framework. [www.musclear.com](http://www.musclear.com)



### Aerospace - Model Rocket Stabilization System

Hayden Ruston and Johnny Moreau are building their system using a supercapacitor, DC/DC converter, 10-axis inertial measurement unit, and servos.



### Biomedical - Navigational Aid for Visual-Spatial Disabilities

Paul Hewson, Brenden Henriques, and Wesley Naus test out their Xbox Kinect based system that will provide verbal walking directions towards a chair at a dinner table.