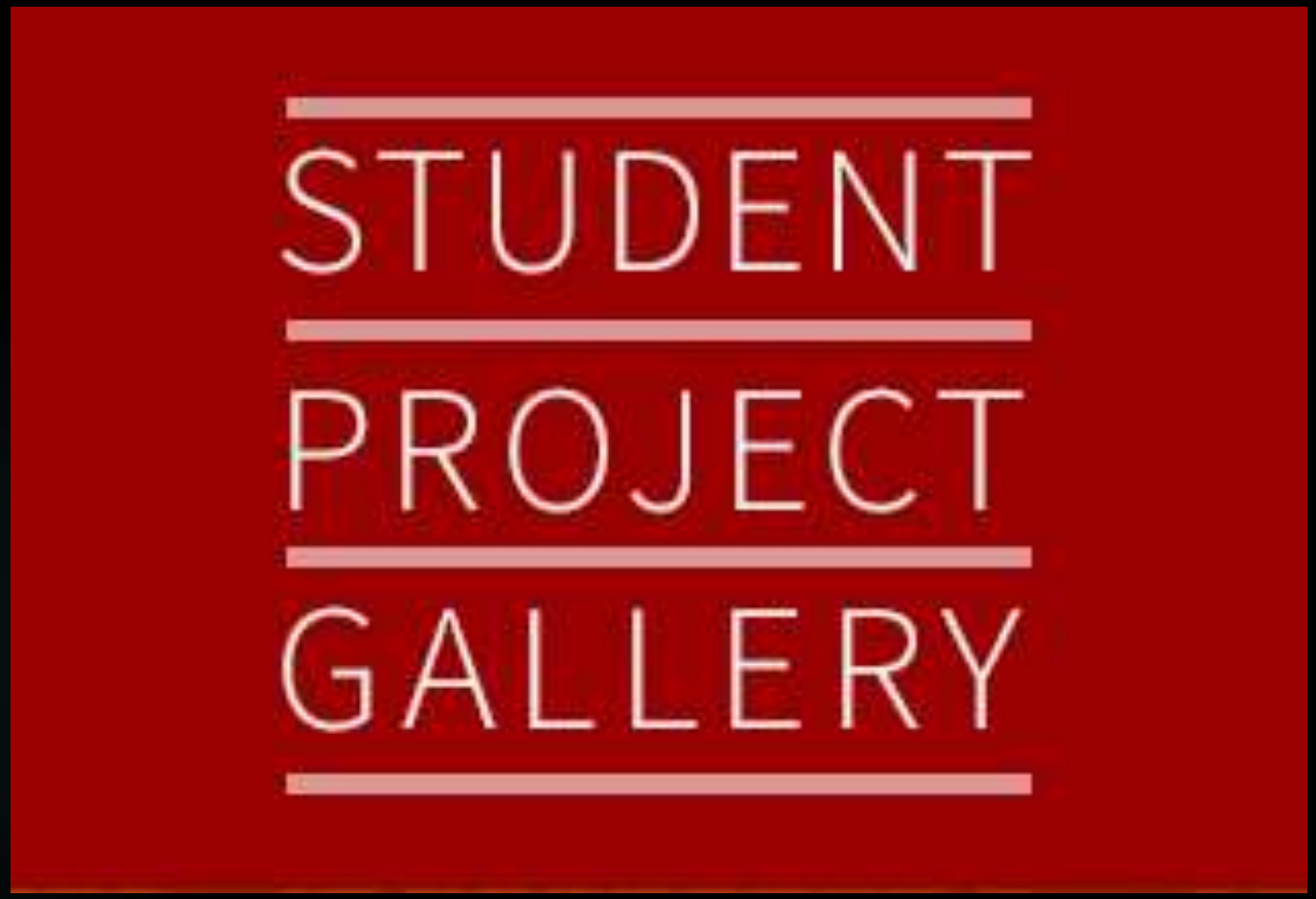
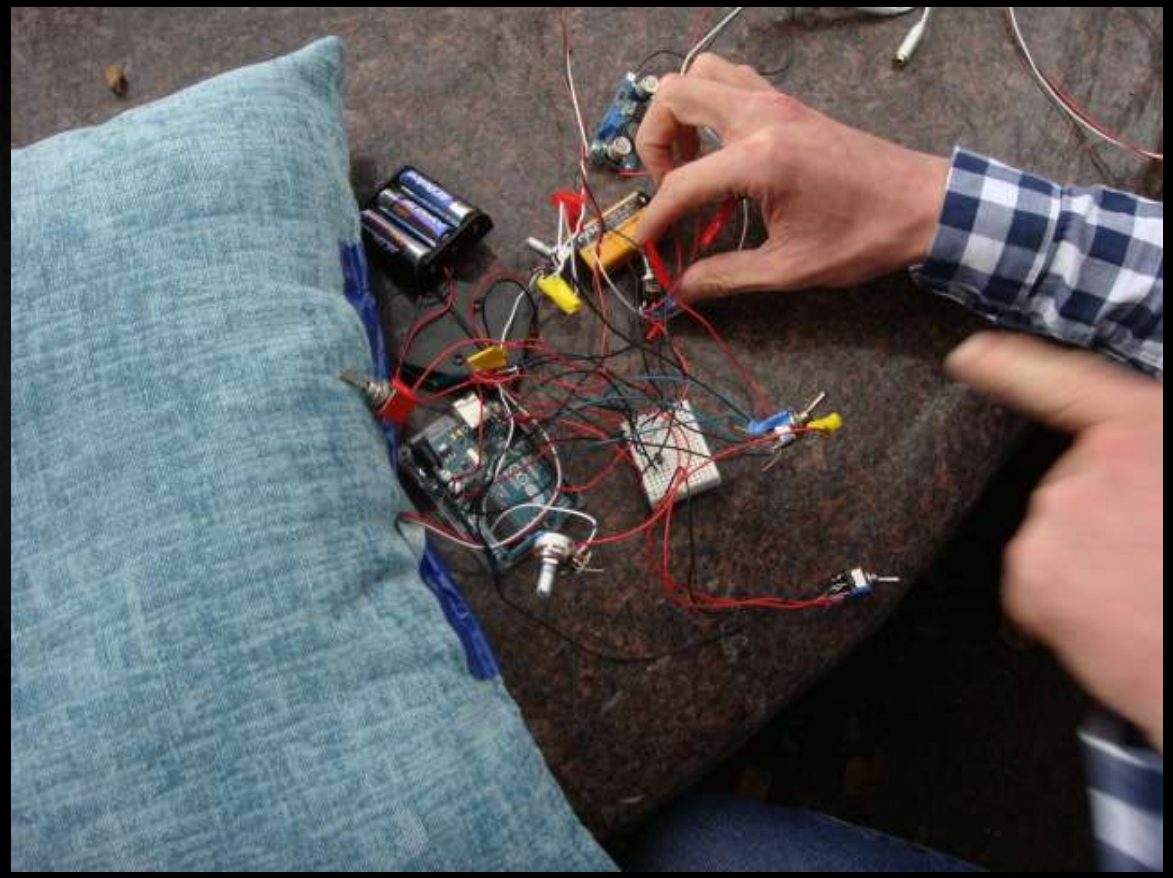
Student Projects from 2017

ENGR110



David L. Jaffe, MS

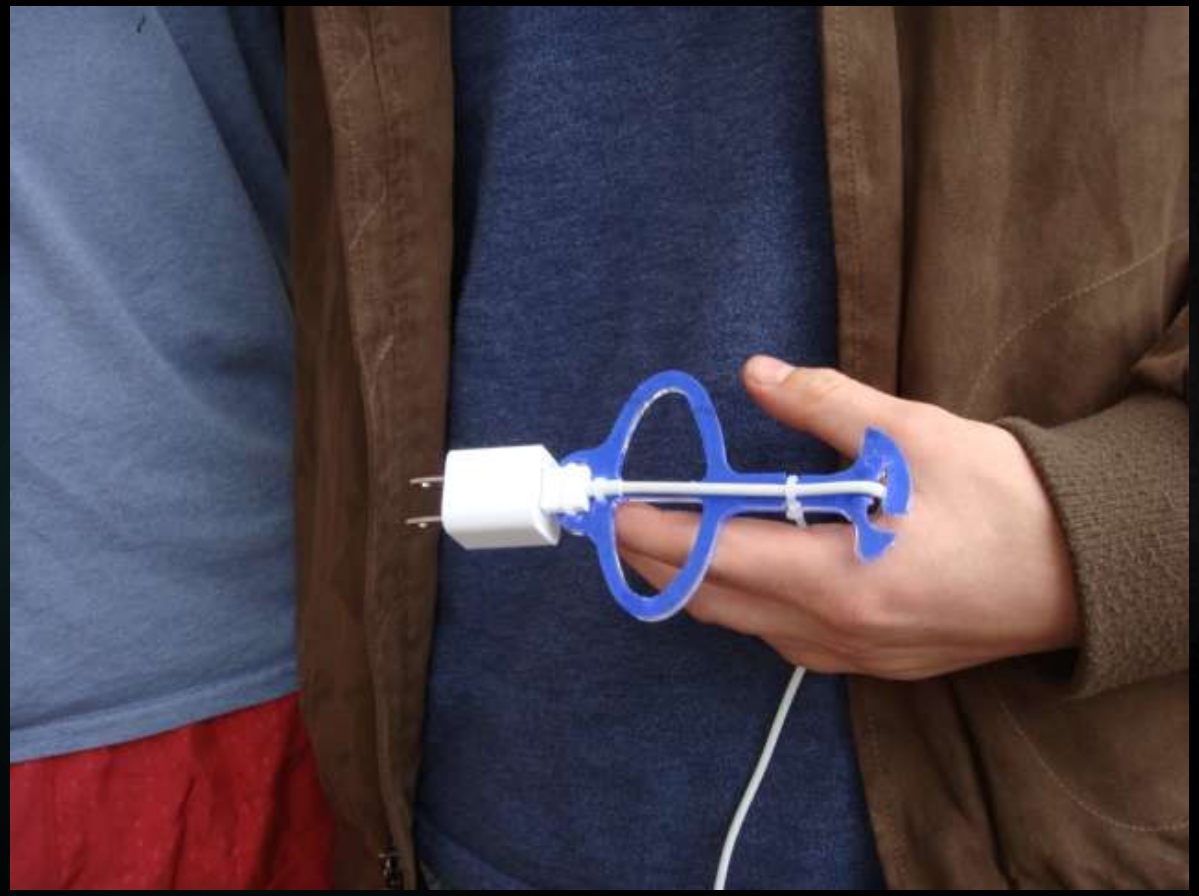
Explore designs to provide encouragement and enhance the dance therapy experience for both wheelchair users and individuals who can not stand for long periods.



Dance Therapy Project

Explore designs for cords (power, USB, and charging) that would facilitate their handling, plugging-in, and unplugging for individuals with impaired grip and hand/arm function like Molly.

RESNA Student Design Competition Finalist

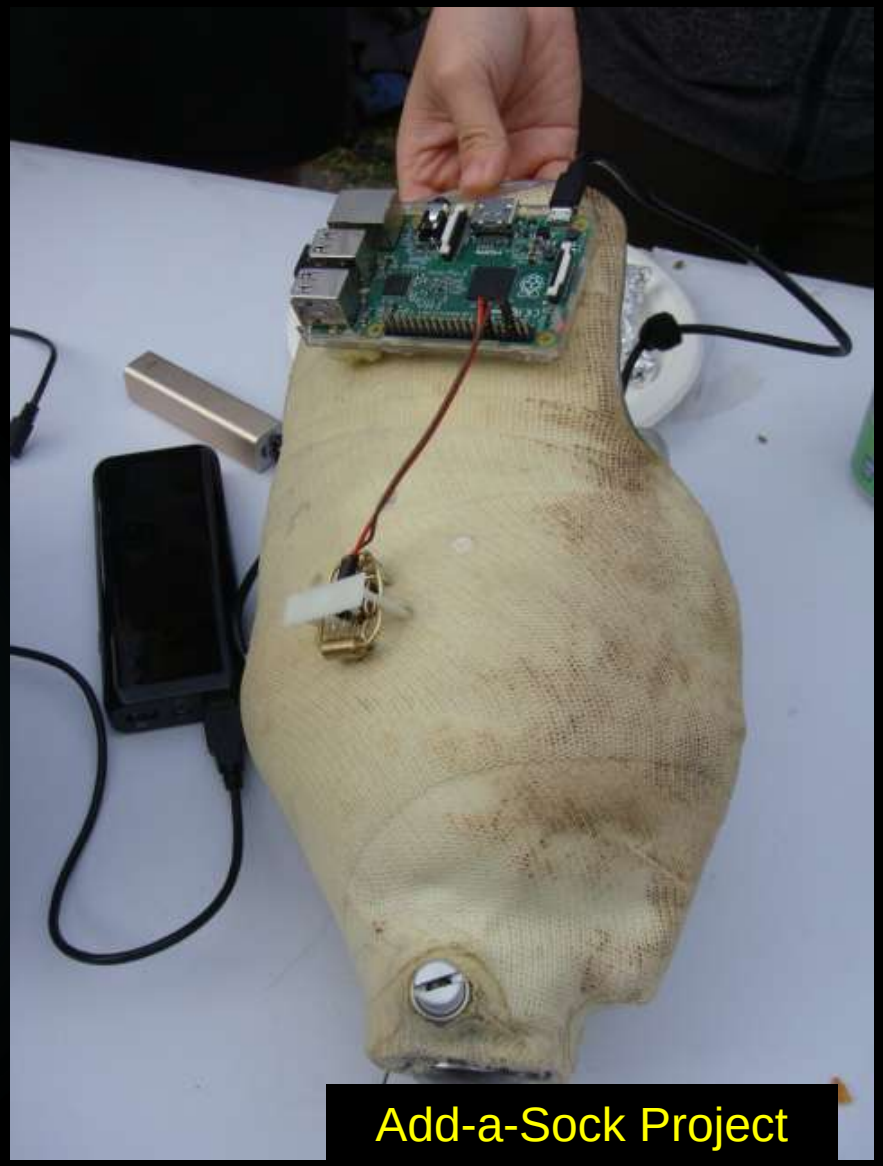


Plugs for Molly Project

Explore designs to offer a new and innovative play and educational experiences for kids at the Magical Bridge Playground that incorporate multiple senses, actions, and outcomes.

Magical Bridge Playground Project

Explore designs for a simple pressure sensor system, to fit unobtrusively inside a prosthetic device, to alert the user when it is time to add (or remove) a sock.



Add-a-Sock Project

Explore designs to offer a new and innovative play and educational experiences incorporating multiple senses, actions, and outcomes.

Magical Bridge Playground Project

Explore designs that would allow artists with developmental disabilities or range of motion and muscle / motor control challenges to be more independent and increase their ability to participate in art.

Art Tools Project

"Explore designs for a mechanism, attached to my existing knee brace, which would improve its stability and provide a significant elastic rebound during deep knee flexion. The device would also serve as a shock absorber by dampening knee flexion and storing the energy for rebounding the knee into extension." Max

Orthotic Rebound Shock

Explore designs that will add a mechanism to walking sticks that would facilitate picking up small objects on the floor.

Pickup Stick Project

Selected Student Projects from 2016

ME113

STUDENT

PROJECT

GALLERY

Explore designs for a custom walking stick design for an older adult.

Wookies - ME113 2016

Explore designs to offer a new play and educational experience such as a mechanical sculpture activated by children. Choose a promising idea and design, build, and test a scaled prototype.

Explore designs that improve hill ascent and decent with a conventional prosthetic foot

Doctorate - ME113 2016

Explore designs that will improve the strap attachments on a scoliosis brace.

Claire – Individual Project 2016