

Michael Urich

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EDUCATION

UNIVERSITY OF PITTSBURGH
BS, ELECTRICAL ENGINEERING
Graduated Dec 2017

SKILLS

PROGRAMMING

Matlab • Python • Bash • C
PHP • HTML/CSS/JS • L^AT_EX

HARDWARE DESIGN

Altera Quartus II • PSpice • Eagle
SolidWorks • Autodesk Fusion 360

LINKS

LinkedIn: [mikeurich](#)
Github: [mike-u](#)
Devpost: [mikeurich](#)

WEBSITE PORTFOLIO

[pittdesignhub.com](#)
[ivis.eps.pitt.edu](#)
[pharmacy.pitt.edu](#)
[overdosefreepa.pitt.edu](#)

AWARDS

- First place, engineering school Design Expo, Dynastim project (2015)
- Finalist in Randall Family Big Idea Challenge, Dynastim project (2015)
- First place, engineering school Design Expo, Dynastim project (2014)
- BK Simon Family Scholar (2014)

WORK EXPERIENCE

IMAGE VISUALIZATION AND INFRARED SPECTROSCOPY FACILITY

COMPUTER SYSTEMS SPECIALIST

Oct 2016 – current | University of Pittsburgh | Supervisor: Dr. Michael Ramsey

- Designed lab webpage using HTML/CSS/JS.
- Managed several Linux servers, including a 12-node Beowulf compute cluster, web server, and network storage array.
- Led technical support on Windows, OS X, and Ubuntu, as well as computer hardware installation and repair.

LABORATORY FOR COMPUTATIONAL NEUROSCIENCE

UNDERGRADUATE RESEARCH ASSISTANT

Mar 2016 – Oct 2016 | University of Pittsburgh | PI: Dr. Zhi-Hong Mao

- Developed a system for detecting eye saccades and blinks through a wearable EEG headset to create an eye-tracking keyboard, allowing paraplegic patients to communicate using regular consumer devices.
- Independently developed support vector machine in Matlab Simulink for saccade direction recognition.
- Publication submitted to IEEE Conference.

NEUROBIOLOGY DEPARTMENT

UNDERGRADUATE RESEARCH ASSISTANT

Mar 2015 – Sep 2015 | University of Pittsburgh | PI: Dr. Bryan Hooks

- Worked with Dr. Bryan Hooks on image processing using Matlab and ImageJ to develop a novel method of quantifying neuronal connectivity in the motor and sensory cortices of the mouse brain.
- Work culminated in a published Java plugin for ImageJ image stacking and a publication was accepted to BMES 2015 Annual Meeting.

PROJECTS

BIOENGINEERING MAKERSPACE

May 2017 - present

- As part of a group of students, planned and built a makerspace for students to design and construct projects.
- Conducted workshops on CNC milling to over thirty students.

DESIGN HUB | WEBMASTER, CLUB OFFICER, TEAM MENTOR

Jan 2015 – present

- Mentored three design teams, providing electrical engineering skills and leadership/management.
- Collaborated with other students to develop Design Hub website.

DYNASTIM | DESIGN HUB PROJECT - TEAM MEMBER

Jan 2014 – May 2015

- Worked with a team of undergraduate students and UPMC physician on an electrophysiology control device for deep brain stimulation
- Competed in several design and entrepreneurial competitions, progressed to final round of Randall Family Big Idea competition