Mickey Smith

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Experience

Software Developer

Digital Primates February 2020 - Present

- Completed rigorous 6 month training on JS fundamentals, React, and developer-client communication
- Engage in daily C-suite level client-facing meetings to report ticket progress and receive organizational updates
- Maintain an enterprise-scale codebase built with React, Redux, and RxJS using git with intense code review
- Work with QA to complete Agile sprints and coordinate client backend efforts with multi-repo frontend

Research Assistant

Shirley Ryan Abilitylab

May 2019 - January 2020

- Created AWS IoT sensor systems to monitor in-field device diagnostics (EC2, API Gateway, Lambda Functions)
- Designed hardware and software architecture for system to reduce pressure ulcer incidence throughout hospital
- Created a neural network (high accuracy ResNet) to determine patient orientation within pressure-monitoring bed

Engineering Co-Op

Kaleidoscope Innovations, Inc.

May 2018 - Aug 2018

- Improved Leap Motion robotic hand program from O(n²) to O(n) time complexity resulting in project continuation
- Led end-to-end revival of robotic arm project resulting in internal Python Flask web application and CLI
- Architected Robot Operating System environment-sensing feature to allow use in variable settings within office

Research Assistant

Purdue Linnes Lab

May 2017 - Aug 2017

- Collaborated on Device for Selective Collection and Condensation of Exhaled Breath (Application No. 62/693,001)
- Designed device housing to include algorithmically-operated controls system resulting in device actuation.
- Programmed Arduino-driven device with CO₂/temperature sensors to reliably collect deep-lung exhaled breath

Engineering Co-Op

Cook Research, Inc.

Aug 2015 - Aug 2016

- Performed Tukey Test statistical analysis on experimental results gathered during GLP-driven bench tests
- Built MATLAB automation tools to more rapidly analyze multiple files at a time, improving Excel-based system

Projects & Highlights

Dinogram Timeline web app for articles created with Mailchimp newsletter using React, AWS Amplify and Mailchimp API

Atalantia Games LAMP stack web application to gather and store user Leap Motion data from Unity3D project

Purdue Human Trafficking Hackathon

Designed PyTorch facial recognition program for 24-hour hackathon

Senior Design - Technical University of Denmark

Photoplethysmography signal acquisition and processing suite

Education

Purdue University Class of 2019

BS Biomedical Engineering
Minor: Electrical/Computer Engineering

Commendations

EPICS Leadership Award 2017 EPICS Presentation Award 2015 2nd Place - Purdue Human Trafficking Hackathon