Justin Clowney

Full Stack Developer

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/in/jclowney



jclowney

Skills —

Overview



Languages

LOC HTML5 • JS • CSS

Java • SQL • MATLAB

Ruby • C++ • MongoDB

Tools/Libraries

Front-End

ReactJS (Flux, Redux), JQuery, AJAX, SCSS/SASS, Bootstrap, Responsive Design

Back-End

Ruby on Rails, NodeJS (Express), PostgreSQL, Sequelize, Mongoose, RESTful APIs, Third Party APIs (Google Maps, Soundcloud, NASA)

Other

Git/Github, LaTeX

Education

May 2017- The Iron Yard - Full Stack Web Dev Coding Bootcamp Houston, Texas

Present

BSc. Biomedical Engineering GPA: (3.3/4.0) Texas A&M University

2012-2016

Research

2015 **BSc. Undergraduate Research Assistant** Texas A&M University

Thesis: Efficacy of Noninvasive Glucose Sensors After Clinical Animal Trials

- Programmed algorithm in MATLAB for extracting two time-resolved components of a single luminescence signal acquired from sensors
- Created a LabVIEW program and GUI for automatically measuring oxygen concentrations in solution using an electrode instrument
- Constructed testing system and developed program for characterizing response of glucose sensors to varying continuous glucose concentrations
- Tools: MATLAB, LabVIEW, COMSOL, Solidworks

Experience

July 2017 Polybus - Hackathon Project

AngelHack

- Made a full-stack application that connects medical missions in third world countries to volunteers and physicians.
- Tools: JS, PostgreSQL, Loopback

June 2017 Soundcloud App

The Iron Yard

- Practiced API calls by constructing a site that allows to search for songs by artist, and plays them back with an equalizer
- · Tools: JS, HTML, CSS

Sep 2015 -May 2016 **Smart Intra-Venous System**

Texas A&M University

- Worked in collaboration with Quest Medical Inc. to find a niche in the IV market
- Integrated a mass flow sensor, stepper motor, Arduino board, and a custom 3D printed case
- Programmed negative feedback system using LabVIEW and an Arduino board
- Utilized Agile methodology to mediate the design process. Maintained a Design History File to illustrate version history control.
- Tools: LabVIEW, Arduino, Solidworks

Oct 2014 Optical Heart Rate Monitor

Texas A&M University

Council of Undergraduate Research in Engineering

- Constructed a functional pulse oximeter to measure heart rate
- Designed and soldered a circuit that takes the raw signal from a photodiode, filter out specific ranges of frequencies, and amplify the rest in order to have an LED solely light up with each heart beat

Leadership

2014-2015 Treasurer

2015-2016 I	President	Council of Undergraduate Research in Engineering

2015-2016 **Treasurer** Engineering World Health