Justin Clowney

Software Developer

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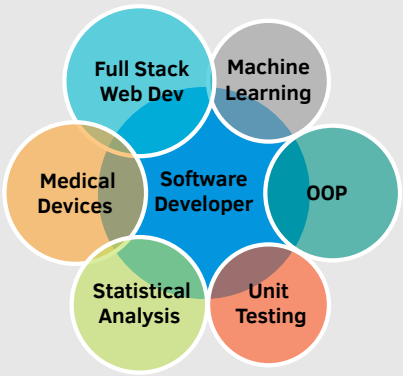
jclowney

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-Present — **The Iron Yard** - Full Stack Web Dev Coding Bootcamp — Houston, Texas

2012-2016 — **BSc. Biomedical Engineering** GPA: (3.3/4.0) — Texas A&M University

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

- 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

2015-2016 — **President** — Council of Undergraduate Research in Engineering

2015-2016 — **Treasurer** — Engineering World Health

2014-2015 — **Treasurer** — Council of Undergraduate Research in Engineering