Mark Lang

lang.m@husky.neu.edu http://marklangdeveloper.com https://github.com/mlang251

Northeastern University, Boston, MA

Bachelor of Science in Electrical Engineering May 2017
GPA: 3.756
Honors: Dean's List (all academic semesters)
Relevant Coursework: Data Structures & Algorithms, Advanced Writing in Technical Professions
Activities: NU Songwriters Club, NU Choral Society, Acoustical Society of America

Web Development Training

Current academic courses: Fundamentals of Networks
Lynda courses: Building a Website With Node.js and Express.js, Up and Running with ECMAScript 6, Building a Polling App with Socket IO and React.js, HTML5: Structure, Syntax, and Semantics, Javascript Essential Training, Bootstrap 3 Essential Training
Codecademy courses: HTML & CSS, Javascript, jQuery, ReactJS, Python, Git

Tools and Languages

Proficient in: HTML5, CSS3, JS, React/Redux, Node/Express, Socket.io, jQuery, Bootstrap, ES6, Git, unit testing in Jest and Enzyme
Experience in: Python, Windows Batch, C++

Capstone Project

Audio Effects Box May 2016 - Present
https://github.com/mlang251/AudioEffectsBox/tree/develop_server/server_ui
Purpose: To build a tool that can sense a music performer's hand motions in a three dimensional space, and use the xyz coordinates, as well as hand gestures, to change the parameters of audio effects in a DSP application in real time
Primary Responsibilities: Building the UI and server portion of the project. The UI is built with React and the server is built in Node on an Express framework. The server controls the flow of data between multiple client applications (using socket.io and UDP sockets), while the UI is responsible for rendering an intuitive experience for the user to build audio effects chains

Professional Experience

QinetiQ-North America – Waltham, MA July 2016 – Dec 2016
Electrical Engineering Robotics Hardware Co-op

- Provided electrical engineering support for a 10-person team while working with many simultaneous projects, such as design of internal parts for robot systems
- Originated more than 30 technical drawings in Microsoft Visio and procedural documents in Microsoft Word to be used for internal production reference
- Tested and performed troubleshooting on more than 50 printed circuit boards as well as full systems, with the purpose of debugging failures and preparing for production

Celera Motion – Bedford, MA June 2015 – Apr 2016
Electrical Engineering and Product Marketing Co-op

- Managed the company social media pages, published one post per week on various field-related topics, with the purpose of directing traffic to company website
- Wrote a customer facing technical document which gave an explanation of a proprietary technology, for the purpose of educating customers on using the technology
- Provided feedback on company website and YouTube videos, resulted in many changes and edits made to website UX and video layout
- Diagnosed product electrical failures and created documentation to be used as a guide for fixing common issues while manufacturing boards

Bose Corporation – Framingham, MA June 2014 – Jan 2015
Product Safety Co-op

- Disassembled products and found root causes of failures, generated technical reports of findings which led to re-design of some products to avoid possible electrical safety hazards