




Tyler Coleman

 (318) 518-0154
 coleman.tyler@outlook.com
 tyler-coleman.github.io

Skills

Programming Languages

JavaScript ES6, HTML, CSS, C++, Java,
Visual Basic, MATLAB, SQL, VHDL, x86
Assembly

Frameworks and Libraries

React, Node, Redux, jQuery, Boost,
Unity, NumPy, SciPy, OpenCV

Services, etc.

AWS, MongoDB, Git, JIRA,
Multithreading, Signal processing,
Embedded systems

Education

Tufts University

B.S. Electrical Engineering, cum laude
Aug 2013 – Aug 2017

Coursework

Microprocessor architecture, data
structures, DSP, web development,
communications systems, linear
systems, feedback control systems,
computational physics (Python),
probabilistic systems analysis

Projects

Hot Lunch - hot-lunch.herokuapp.com

React.js, Redux, Node.js, MongoDB Atlas, Cloudinary, Firebase

- Designed a social media service based on an interactive rating system, allowing users greater influence over the content that reaches their friends.
- Utilized React to develop a seamless, sleek front-end that encourages engagement via interactive UI components.
- Crafted CSS modules for a variety of components and containers.
- Defined and implemented all endpoints for RESTful server API using Express.
- Developed drivers to link server with multiple cloud-based services to enable data persistence.

Interactive Fractal Explorer

C++, SDL graphics library

- Developed a desktop application that allows users to explore a Mandelbrot fractal and customize its appearance with controls for histogram coloring and resolution (for a performance tradeoff).
- Program tracks nearly **500,000** pixels and redraws them as the user zooms and pans.

Light Cycles

Phaser2D, Node.js, Socket.io, MongoDB

- Developed a multiplayer TRON clone for browser play, with real-time head-to-head gameplay and matchmaking enabled by Socket.
- Implemented advanced stat tracking and data persistence for registered players via a NoSQL database.

Work Experience

Tata Consultancy Services

Sep 2017 – Oct 2018

Software Engineer

- Directed an overseas team of manual testers, coordinating efforts and maintaining regular communications.
- Reduced manual test times by **50%** by automating existing procedures using tools like VB and Selenium combined with complex SQL database manipulation.

Autoliv Active Safety

May 2016 – Sep 2016

Technical Intern

- Performed bench analysis of failing radar devices to identify root causes of malfunctions. Maintained communications with clients regarding test and fix progress.
- Explored and identified areas for device improvement via a vast analysis of hardware design and cross-team collaboration.