Rick Bresnahan

Software Engineer

Boston, MA
(415) 844 – 0520
Richard.M.Bresnahan@gmail.com
www.rickbresnahan.com
www.github.com/chardbres
linkedin.com/in/rickbresnahan

Versatile engineer with a history of electromechanical product design and recent experience in software development, interested in re-focusing into professional software engineering. Detail-oriented, efficient, and committed to constant improvement. Strong motivation to learn quickly; exemplary communication skills.

Selected Software Projects

Personal Website: www.rickbresnahan.com (for additional details)
Work From Roam: https://github.com/sei-uxdi-collab/work_from_roam-client

- Worked on team of developers and UI/UX designers to develop a remote workspace finder/rating application
- Designed a front-end filtering feature to serve up matching workspaces based on user selections
- Created a carousel component to fill with filtered workspaces (names, addresses, and user ratings)
- **Utilized: Google Maps API, React.js, SCSS, Bootstrap, Ruby on Rails, Axios, Heroku (cloud hosting)**

Smash Factor: https://github.com/chardbres/smash-factor-client

- Developed a single-page React application to allow users to track golf shot performance by club
- Implemented user authentication protocols and authenticated routing
- Designed RESTful backend server for persistent storage of user's clubs, and shot yardages by club
- Integrated third-party tools to export CSV files of club performance data
- **Utilized: React.js, SCSS, MongoDB, Express.js, Node.js, Axios, Heroku (cloud hosting)**

Let's Chat: https://github.com/undefined-sei/team-project-client

- A real-time, bidirectional and event-based chatroom application using the Socket.io API
- Utilized Ajax protocol for asynchronous CRUD calls to RESTful backend server
- Implemented user authorization to limit message create/delete/update access
- **Utilized: HTML5, SCSS, JavaScript, Ajax, Ruby on Rails, Socket.io API, Heroku (cloud hosting)**

Professional Experience

Electromechanical Engineer // Palmos Co. | Somerville, MA | October 2017 – July 2019

- Led all electromechanical product development efforts for company
  - Completed prototype of deployable remote sensor for landslide prediction per USDA government grant
  - Programmed microcontrollers to collect accelerometer data and transmit data packets via LoRa radio
  - Designed industrial monitoring solution for MBTA water pump room, integrating industrial VPN router with existing PLC infrastructure for over-the-air machine health analysis
- Built small-scale soil runoff flume for USDA grant-funded debris flow experiments
- Performed all electronics bench work for new prototypes (hand-soldering, electrical testing, etc.)
- **Leveraged Knowledge: C programming in Arduino IDE, soldering/multimeter, LoRa OTA data transmission**

Mechanical Engineer // CyPhy Works | Danvers, MA | August 2015 – September 2017

- Constructed electro-mechanical assemblies (CAD, prototyping, machining, electrical bench)
- Subjected air vehicles and associated ground structures to thermal and structural analysis
- Worked with third-party vendors to fabricate parts and assemblies

Education

General Assembly // Software Engineering Fellow | Boston, MA | October 2019 – December 2019

Boston University // M.S. Mechanical Engineering | Boston, MA | September 2013 – December 2015

Brown University // B.S. Psychology | Providence, RI | September 2006 – May 2010

Skills

Software: (*proficient)*: React.js, SCSS/CSS, HTML5, JavaScript, Node.js, Linux, CAD, Git *(familiar)*: Ruby, C++, SQL, AWS