

# Sam McGrail

(508) 415-3544 ♦ sammcgrail@gmail.com  
sammcgrail.com ♦ github.com/sammcgrail ♦ linkedin.com/in/sammcgrail

Experienced software engineer with 6+ years of work experience. Proven ability working with remote and onsite teams. Strong interpersonal skills and clear communicator. Ardent developer, seeking to bring their proficient full stack background to a set of new challenges.

## PROFESSIONAL EXPERIENCE

### **doblePRIME**

Boston, MA

*Software Engineer, UI Developer*

*October 2015 – Sept 2021 (Current)*

Created an interactive dashboard for transformer substation engineers in the field.

- Extensive use of various javascript data visualization libraries (some altered for custom business requests) to allow large datasets to be presented more clearly. D3.js based viz with SVG and HTML5, using canvas elements and WebGL to render thousands of datapoints in the browser.
- Added support for an interactive polar chart with a control slider to win a contract before the competition could create a similar visualization technique.
- Custom LAMP stack (P for Python) with JavaScript graphing libraries, highcharts, canvasjs.
- Developed custom software for a rugged high voltage transformer embedded systems project (IDD-200, PD-Guard, Delphi, Domino). Built alert state system and condition monitoring for power station assets. Custom alert system with SMS, email, on corporate network.
- Facilitated installation onsite at National Grid, Drax Power Station, requiring close customer interaction and development of precise user guides.
- Provided firmware updates, supported clients, and deployed devices in restrictive environments (heat, high voltage). Worked with a remote team spread across many timezones.

### **Launch Academy**

Boston, MA

*Junior Full Stack Web Developer*

*May 2015 - August 2015*

- Worked in an immersive environment supplying over 400 hours of experience towards becoming a proficient full-stack developer. Collaborated with ~40 developers with daily pair programming.
- Developed software applications with test driven development in mind using Ruby, Rails, PostgreSQL, JavaScript, jQuery & CSS. Incorporated strict best practices, including Agile methodologies.

### **Doble Engineering**

Boston, MA

*Laboratory Technician*

*May 2013 - May 2014*

- Performed dissolved gas analysis (ASTM D 3612) on transformer mineral oil samples.
- Detected thermal and electrical problems through analysis of chromatogram data to prevent dangerous equipment failure. Rigorous testing process requiring knowledge of power systems.
- Built visual basic macros for lab report Excel spreadsheets, resulting in increased sample rate.

### **Professional Musician**

Natick, Boston, MA

*Pianist*

*June 2012 - May 2016*

- Played lounge music weeknights for 3-4 hours at various restaurants.
- Provided a sophisticated atmosphere for diners with solo jazz piano.
- Able to sight-read popular songs, take requests, and play for the audience in mind.

## EDUCATION

**University of Massachusetts Amherst**

Amherst, MA

B.S. Neuroscience

*September 2009 - May 2013*

## TECHNICAL SKILLS

**Languages:** JavaScript/TypeScript (expert), Ruby (proficient), Python (proficient), C/C++ (rusty),

**Databases:** SQL, NoSQL, Mongo, QuestDB

**Software/Tools:** React, Webpack, Node, \*.js, shell-fu, git, bash, custom VM curation

**Hardware:** Embedded systems, DIY PC construction, A/V configuration