**Sam McGrail**

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**TECHNICAL SKILLS**

**Languages**: JavaScript, Python, Ruby, C/C++

**Databases**: SQL, NoSQL

**Software/Tools**: \*.js, p5.js, shell-fu, git, python piping, artisanal VM curation

**Hardware**: Custom PC construction, A/V configuration, Mechanical Keyboard Devotee

**PROFESSIONAL EXPERIENCE**

**PRIME** Boston, MA

*UI Developer, Software Engineer October 2015 – May 2020* Created an interactive dashboard for transformer substation engineers in the field.

* Runs on an embedded system (IDD-200, PD-Guard, Delphi, Domino). Checks transformer maintenance equipment datalogs with industry standards / user set alerts. Improves worker safety by warning of potential faults, while maintaining uptime by accurately detecting false positives.
* Custom LAMP stack (P for Python) with JavaScript graphing tools.
* Extensive use of D3.js and Highcharts data visualization libraries allows sensor data to be presented more clearly. Phasor data presented with an interactive slider.
* Worked with a remote team spread across England, Romania, and East/West coast USA.

**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.
* Actively collaborated with over 40 developers on a daily basis through paired programming
* Developed software applications with TDD (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*

* Ran 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 and sensors
* Increased sample testing efficiency with visual basic macros for Excel spreadsheets.
* Improved time limited testing rate 20% by running an extra 40 samples on Saturdays.

**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.
* Increased restaurant Yelp ratings with positive reviews, and helped bring in a crowd of regulars.
* Played with a jazz combo trio at local political fundraisers and events.

**EDUCATION**

**University of Massachusetts Amherst** Amherst, MA

B.S. Neuroscience *September 2009 - May 2013*