**Sam McGrail**

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Experienced software engineer with 8 years of work experience. Proven ability working with remote and onsite teams. Strong interpersonal skills and clear communicator. Ardent developer seeking challenges.

# PROFESSIONAL EXPERIENCE

**Glaukos – Corneal Health Division** Boston, MA

*Senior Software Engineer Sept 2021 – (Current)*

* Designing and developing medical device software using React, Redux, TypeScript, and Node.
* Creating a GUI for a touchscreen that interfaces with an embedded system via Protocol Buffers.
* Streaming images from multiple high framerate cameras using the WebSocket API, via socket.io.
* Overlaying targeting reticles and boundaries over resultant video feed using performant SVGs to allow medical professionals to perform eye disease preventative treatments on device.

**doblePRIME** Boston, MA

*Software Engineer, UI Developer Oct 2015 – Sept 2021*

* Created an interactive dashboard for transformer substation engineers. Aggregated data from multiple hardware sources and set up a REST for alerts and monitoring.
* Customized JavaScript visualization libraries 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.

**Launch Academy**  Boston, MA

*Junior Full Stack Web Developer May 2015 - Aug 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, AWS, PostgreSQL, JavaScript, jQuery, Bootstrap & 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.
* 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. Psychology – Neuroscience Track *Sept 2009 - May 2013*

# TECHNICAL SKILLS

**Languages**: JavaScript/TypeScript, Ruby/Rails (proficient), Python (proficient), C#, C++ (basic)

**Databases**: SQL, Postgres, SQLite, mongo (basic)

**Software/Tools**: React, Redux, Node, Webpack, socket.io, Jest, CSS, CI, shell-fu

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