

Experienced generalist senior software engineer with extensive IoT and web experience, seeking opportunities to join an exciting seed or pre-seed stage remote or SF-area startup

## WORK EXPERIENCE

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### (2019–2023) Verily Life Sciences (Alphabet) — Senior Software Engineer, Manager

- Led and managed the [Verily Retina Camera](#) platform software team (3 direct reports), focused on fleet management, updates, manufacturing, system robustness, reliability, and scalability, from manufacturing to launch
- Part of a 5 person team of SWEs that wrote almost all the software for an implantable nerve stimulator and charger now in clinical trials for the treatment of rheumatoid arthritis (marketed by [Galvani Bioelectronics](#))
- Developed embedded software for small connected medical devices, including the Verily Study Watch, hearing aids, and TL of a connectivity hub with an LTE modem running ChromeOS
- Worked across various microcontrollers and platforms, with significant experience in Bluetooth Low Energy (BLE) and occasional work with Android apps and machine learning systems. Got a TensorFlow model running on a microcontroller.
- Wrote C++, bash, and Python, and maintained CI and software update infrastructure

### (2016–2019) Google — Software Engineer

- NIC Software on Platforms team: Developed high-performance networking solutions for GPU ML-model training (Babelfish) and other applications with low-level host libraries and NIC firmware. Wrote OpenMPI implementation on our software
- Participated in a two-week rotation at a data center, diagnosing problems, replacing motherboards, and swapping bad hard drives

### (2015) Google — Software Engineering Intern

- Dramatically reduced page load times of Google Cloud Monitoring platform (Stackdriver) by modifying it into a single-page application

### (2014) Handshake — Software Engineering Intern

- Second non-founder engineer; before the company had paying customers or VC investment, I contributed to a Rails app that became a platform serving millions of students globally; traveled all the way around Lake Michigan twice to meet users at conferences and universities

### (2013) G2.com — Web Development Intern

- Part of a team of five web developers building the platform during its Beta phase

## SKILLS

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- Systems: Yocto (Linux distro builder), Mender (IoT updates), bash scripting, Linux, GitHub Actions
- Languages: C++, Python, Ruby, JavaScript
- Frameworks: Ruby on Rails, NextJS, ReactJS, Hugo, Android

## RECENT PROJECTS

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- [MySolarBudget.com](https://mysolarbudget.com) - Calculates electrical load, solar panel and battery installation size for off-grid applications. Technologies: NextJS, GCP, Vercel
- [TranscribeScribe.com](https://transcribescribe.com) - A tool for field linguists to do automatic speech recognition of undocumented languages to international phonetic alphabet. Fine-tuned OpenAI Whisper speech-to-text on a custom dataset that I assembled. Technologies: NextJS, HuggingFace (ML inference), TensorDock (training), GCPI, Vercel

## EDUCATION

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**Northwestern University / BS Computer Science / GPA: 3.78**

- Full-ride Evans scholarship
- Activities: Evans Scholars Executive Board; Team Captain, Club Ultimate Frisbee; Computer Graphics Teaching Assistant; Part-time dishwasher all four years