Jeffrey Milling

Full Stack Developer · Senior Software Engineer @ Trellisware · Co-owner & CTO @ JMKRIDE USA

(480) 390-1492 | jeffmilling@gmail.com | jeffdude.github.io | Jeffdude | San Diego, California

Summary

I am a highly driven goal-oriented software engineer with a variety of technical experience aquired through self-teaching, industry experience, and formal education. After over five years experience in large-scale system architecture and administration from my time at Facebook and ViaSat, I dove headfirst into the world of Javascript and React. I obtained a strong full-stack knowledge base by implementing and deploying four public sites for my company JMKRIDE. Since then, I've handled scaling bottlenecks at a fast-moving startup, and I've tackled tech debt re-architectures of several legacy and backward-compatible codebases. Now, I am seeking new challenges in the form of full-stack software consulting.

Work Experience

Trellisware Technologies Inc. — San Diego, CA
Senior Software Engineer - Applications Team — Oct. 2023 - Present

- Maintain, modernize, and future-proof the company's radio configuration portal.
- Carefully designed all updates to prevent unintended side-effects and ensure forward and backward compatibility with radio software.
- Lead the effort to transition our team to Typescript. All new components are now written in Typescript.
- Maintain our React Native radio communication app, which has similiar challenges regarding radio compatibility.
  During my time at Trellisware, I have updated the app to a modern RN version, and re-architected it to almost-full Typescript type coverage.

JMKRIDE USA — San Diego, CA
Co-owner & Chief Technical Officer — Sep. 2019 - Present

- **Stocktracker**: Built and deployed a modular internal inventory management website
  v1: Javascript, Python, MySQL, v2: React, Node.js, MongoDB, AWS
  - Fully dynamic inventory structure of parts, categories, category sets
  - Multiple inventories, multiple users, and user-attributed logs of every action
  - Part consumption graphs for visualizing inventory trends
  - Modular Node backend shared with Freeskater Finder
- **Freeskater Finder**: Built and deployed a customer-facing web app. Users place their pin on the map and connect with other freeskaters.
  React, Node.js, MongoDB, AWS
  - Users create an account, input a bio, profile picture, and their social media links.
  - Users configure their visibility and privacy, controlling whether friend requests are required.

GoSchoolBox Inc — Fully Remote
Senior Software Engineer - Full Stack — June 2022 - February 2023

- Lead a team of six engineers in a fast-moving agile development environment, including daily scrums and capacity planning meetings
- Implemented full stack RFC-compliant 2-factor authentication functionality over the course of a single sprint (10 days)
- Planned and executed multi-sprint re-architecture of allowing for a school-district-administrator role in addition to the tutor/tutee binary.

Facebook — Menlo Park, California
Production Engineer — Sep. 2017 - Sep. 2019

- Maintained the performance and reliability of hundreds of thousands of servers running several cache services including TAO, Facebook's social graph cache, backed by the world's largest MySQL deployment
- Developed and deployed a new internal tool to regularly load-test cache service to detect performance regressions
- Developed and deployed an internal tool to simulate disaster-events such as network cuts or power loss events to verify service reliability during unplanned unavailability events

ViaSat Inc. — Carlsbad, California
Software Engineering Intern — May. 2015 - Aug. 2015

- Built a highly modular cloud-based testing infrastructure for Viasat's next generation core switch
- Final product was phased into use by the ViaSat Satellite Applications team before the conclusion of the internship.

Harvey Mudd College — Claremont, California
Student System Administrator — May. 2014 - May. 2017

- Administrator of numerous Linux servers in use by the Harvey Mudd Computer Science Department and its students
- Built two high performance VM hosting servers using Gentoo Linux and the KVM/QEMU hypervisor for the system administration class.
- Co-taught aforementioned system administration class for the fall and spring semesters 2015

Education

Harvey Mudd College — Claremont, California
B.S. Computer Science — Aug. 2013 - May. 2017

- JArthur Award for exceptional performance by the CS Department - 2015
- **Relevant classes** - Computer Systems (C), Software Development (Android, Java), Artificial Intelligence (Python), Data Structures and Program Development (C++), Programming Languages (Python, Java, Racket)

Technology

Javascript, Typescript, React, Redux, Next.JS, Node.JS, Python, MongoDB, MySQL, AWS, Git, Github, Gitlab, SVN, Vim, VSCode, LaTeX, Docker, Linux