Christopher Cooper

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*For my work in 2024, see **Other Experience — Saturn**.*

Work Experience

Databricks databricks.com — San Francisco, CA
Software Engineer — January 2021 – December 2023
Rolled out a new terabyte-scale streaming database of test results handling 25+ million records/day, powering over a dozen internal analytic use cases. **Utilized** this to intelligently choose high-signal tests, keeping PR validation fast as the number of tests increased by 1.6x.
Expanded a test failure classifier to automatically handle 10s of millions of test results per day, enabling reduction of triage by 60-75%. **Increased** release frequency by 2.4x via streaming analysis of test results.

Kelda — Berkeley, CA
Senior Software Engineer — May 2020 – November 2020 (startup folded)
Software Engineering Intern — Spring 2019
Built Blimp, a distributed tool to enable software development in the cloud, as part of a 5-person startup. **Integrated** with the Kubernetes and Docker APIs directly. **Implemented** multiple features end-to-end.

Brave Software *Software Engineering Intern* — Summer 2019 – Fall 2019
Studio by Purdue *Student Developer Intern* — Summer 2016, Summer 2018
CS Department, Purdue University *Teaching Assistant, Systems Programming* — Summer 2018
Angie's List *Software Engineering Intern* — Summer 2017

Other Experience

Saturn github.com/Yasu3D/Saturn — January 2024 – *present*
An OSS rhythm game for specialized arcade hardware, with precise timing and performance constraints. I work full-time on Saturn, as a volunteer on the core team of two. Taught myself game dev to contribute.
Reverse-engineered multiple low-level I/O protocols, for handling input and bitbanging LED data. **Handled** millisecond-precision cross-thread timing sync between audio, gameplay, and I/O.
Implemented complex gameplay logic based on 240 individual touch panels, working directly with playtesters. **Optimized** the game to handle all 240 inputs per frame without excess garbage collection.

Open Computing Facility ocf.io — University of California, Berkeley
Site Manager (top technical role) — Spring 2020
General Manager (overall org head role) — Summer 2019 – Fall 2019
Technical Manager — Fall 2018 – Spring 2020
Led ~100 volunteer staff and 8 paid staff, using $90k+/yr of funding to serve the Berkeley campus. **Leveraged** industry-standard tools like Kubernetes, LDAP/Kerberos, and Puppet config management. **Maintained** an array of servers providing webhosting with 800k+ daily hits, software mirrors, high performance computing, and other services to 6000+ active users and 1000+ student organizations. **Manageed** a computer lab of 30 Debian Linux workstations with thousands of weekly users.

Education and Skills

University of California, Berkeley B.A. in Computer Science 2020

Languages *Proficiency:* Go, Scala, C#, Python, Javascript *Experience:* C/C++, Java, Ruby, Lisp

Tools/Frameworks *Proficiency:* Git, Kubernetes, Linux *Experience:* Unity, Spark, Jenkins, React

This resume: co5.us/resume