Christopher Cooper

christopher@cg505.com github.com/cg505 linkedin.com/in/cg505 cg505.com

2024: Left Databricks to commit full-time to a passion project, 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 select valuable tests, saving money and keeping code change validation fast as the overall 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.berkeley.edu

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

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. **Managed** 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, TS

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

This resume: co5.us/resume