# Will Barrett

Email: barrett.william@gmail.com, Phone: 410-218-7957, Location: Daly City, California

## **Professional Experience**

Chief Technical Officer, Bikehub/Tranzito, January 2023-Present

Head of Engineering, Bikehub/Tranzito, June 2022-January 2023

Principal Software Engineer, Bikehub/Tranzito, September 2021-June 2022

A 50-person company executing on multiple government contracts, including a tens-of-millions program to upgrade Los Angeles's bus stops with technology-enabled infrastructure.

- Leading the development of CurbCMS, a software application to support the new bus stop program in Los Angeles, including geospatial, monitoring, alerting, and advertising tracking features leveraging AWS, Ruby on Rails, Apache Superset, ElasticSearch, Postgres, Jenkins, and various IoT technologies.
- Responsible for all hardware selection and technology support for multiple government-funded programs, working closely with Electrical Engineers and hardware vendors.
- Supporting and improving an existing system of bike parking kiosks around California through the hardware and software lifecycle.

#### Staff Software Engineer, Preset, September 2019-August 2021

Employee 10 at an Andreesen- and Sequoia-backed startup building a business around the open-source project Apache Superset.

- Managed, led, and grew a Feature Team from 3 Engineers to 7 Engineers across three time zones from US Pacific to EU West.
- Led the development of Software as a Service features in preparation for Preset's General Availability launch, including the sign-up flow, account management, payment systems, and management page for multiple Superset instances.
- Transitioned the team from majority on-site to distributed during the COVID-19 lockdowns of 2020.
- Won an all-Engineering hackathon for demonstrating a functioning, automated multiple-instance production deployment system.

#### Staff Software Engineer, Entelo, March 2019-August 2019

Short stint due to an Engineering team and Executive exodus before a merger - joined a 30-person team and left a 6-person team.

- Led a project involving the whole Engineering team that cut total AWS spend by 50% (approximately \$500k/year) over two months.
- Cut build times for the organization on their Rails monolith in CI from 20 minutes to 4 minutes.
- Won an all-Engineering hackathon for leveraging discarded developer laptops as a Continuous Integration cluster.

## Staff Engineer, thredUP, January-February 2019

Extremely short stint on their pricing team due to the announcement of an office move resulting in an untenable commute.

- Won an all-Engineering hackathon for prototyping a new search interface.
- Worked on analysis of pricing experiments in Databricks/Spark.

Senior Software Engineer II, Change.org, November 2017-December 2018

Engineering Manager II, Change.org, May 2017-November 2017

Engineering Manager I, Change.org, August 2016-May 2017

Senior Software Engineer, Change.org, February 2016-August 2016

- Created a system to allow zero-downtime migrations of large MySQL tables, significantly increasing stability and uptime.
- Promoted to lead and manage multiple full-stack feature teams, including one that created the digest email system, a weekly personalized send to 50,000,000 individuals in 18 languages.
- Stepped out of management to work on platform concerns and co-architected a high-volume distributed messaging system in Elixir for the comms platform, replacing Salesforce and saving the company approximately \$4MM yearly.
- After Change.org's second round of layoffs during my time there, I single-handedly supported Change.org's data engineering systems

for months before my departure.

#### Software Developer, Sqwiggle (sqwiggle.com), Speak (speak.io), April 2014-December 2015

Employee number 8 at a startup attempting to bring WebRTC video as a collaboration tool to market for remote work with chat features similar to Slack's current interface.

- Implemented systems allowing Sqwiggle and Speak to move from a peer-to-peer WebRTC connection to leveraging geo-aware video MCU systems, removing low participant limits on the platforms.
- Acted as the primary Operations Engineer for both platforms, supporting application programs and Video MCU systems in AWS.
- Acted as first-line support for the product, handling customer issues and conversing directly with clients and prospects.

#### Senior Software Engineer, Rouxbe Video Technologies (rouxbe.com), June 2013-March 2014

- Created a provisioning system for fast scaling with the existing infrastructure.
- Implemented a real-time classroom video integration for distributed course delivery.

#### Principal Consultant, Tall Green Tree Inc. June 2011-June 2013

- Built the initial MVP of Rentalutions.com, later rebranded to Avail and acquired by Realtor.com
- Assisted in founding Bikeindex.org, a 503c non-profit, currently the most extensive national registry of bicycles assisting in recovering stolen bikes. Since its launch in 2013, the BikeIndex has assisted in the recovery of over \$15MM in stolen property.

### Advertising Industry Work, August 2008-June 2011

- Cut my teeth as a programmer on the "Got Milk? Campaign" in 2008 at Weber Shandwick as an intern.
- Worked on web projects for clients including McDonald's, Jim Beam, and Armor Eckrich at Schafer Condon Carter in Chicago.

# **Thought Leadership & Industry Service**

### Contributor/PMC Member, Apache Superset, March 2020-Present

Apache Superset is an open-source business analytics web application that sits on top of organizations' existing data warehouses.

- Developed and implemented coding standards for the project.
- Audited the system, discovered and resolved several security vulnerabilities.
- Led the development of Alerts and Reports in Superset, Preset's most-requested feature during our Private Beta.

#### Code Reviewer, PullRequest/HackerOne, December 2019-Present

- Reviewing client code part-time during my off hours, discovering and recommending fixes for various problems, including security concerns, performance problems, and maintainability issues for client organizations.
- Wrote content marketing blog posts for the PullRequest blog before the acquisition by HackerOne, leading to increased traffic and inbound interest in the platform. Topics included catching OWASP security vulnerabilities, code review best practices, etc.
- Presented at HackerOne's Security@22 conference, discussing why code review matters for security.

### Associate Instructor, Starter School, February-March 2014

Starter School was a bootcamp program located in Chicago's Merchandise Mart coworking space. I taught "DevOps." We covered server configuration and automated deployment of Ruby on Rails web applications.

## **Education**

## B.Mus. Cello Performance, Peabody Institute of Music at the Johns Hopkins University, 2007

Studied classical Cello performance under Alan Stepansky, former principal cellist of the New York Philharmonic.