# Brenden Matthews - the productivity of 10 engineers for the price of 2

CONTACT Information Phone: contact me Email: brenden@brndn.io

Published Works Code Like a Pro in Rust, to be published by Manning Publications, estimated early 2023.

Public Speaking Have given numerous talks on my work at conferences and private engagements, including but not limited to All Things Open, QCon, LinuxCon, ContainerCon, and MesosCon.

OPEN SOURCE Contributed to hundreds of open source projects, member of the Apache Software Foundation, and have created a number of popular projects with a few highlighted below:

Conky, C and C++ 5600+ GitHub stars

Endlessly configurable system monitor utility for UNIX systems.

thetagang, Python 1500+ GitHub stars

Equity options trading tool for profiting from theta decay. Designed for use with IBKR.

dryoc, Rust 130+ GitHub stars

High quality pure-Rust general purpose cryptography library compatible with libsodium. Features generic hash functions suitable for cryptography, protected memory, zeroization, and SIMD.

Professional Experience

#### Multiple Companies, USA

Founder, CEO April 2019 – present

Founded multiple small software startups in different sectors. Mostly SaaS, self-service and either pay-as-you-go or subscription based. Worked with the goal of bootstrapping moderately profitable businesses in order to sell them.

Braze, Inc., New York, NY

Engineering
Building infrastructure with Kubernetes.

Oct 2018 – April 2019

- Lead an effort to transform ad-hoc Bash-based deployment scripts into declarative Helm and Terraform based deployments
- Provided engineering-wide guidance and training for migrating to Terraform and Helm
- Ported primary Rails monolith to Kubernetes
- $\bullet$  Implemented continuous integration and deployment system for Kubernetes applications

## Citadel LLC, New York, NY

Engineering Oct 2017 – Jun 2018

Joined the platform engineering group as part of the data engineering team to build out Citadel's data platform technology. Primarily working with tools that integrate on-prem and cloud (AWS and GCE) data infrastructure.

- Lead an effort to modernize data access, control, and authorization
- Managed a migration of legacy data systems to PostgreSQL on RDS backends
- Provided technical leadership to the data science team for best practices on building and deploying very large machine learning jobs with Spark, Redshift, and Snowflake

Sales & Engineering

Jan 2015 - Feb 2017

As an early Mesosphere employee, was an integral part of founding the company. Worked on multiple customer engagements, acting in both pre-sales and post-sales positions. Assisted management with fundraising pitches.

- Built the initial sales team by leading key hires for VP Sales, early SEs, SAs, and Head of Services
- Built cloud migration plans for enterprise customers
- Lead and lectured week-long in-depth onsite training sessions
- Advised C-level management at Fortune 500 companies on container technology adoption to accelerate their innovation
- Lectured and gave talks at several meetups and conferences
- Contributed to various engineering efforts
- Published several original blog posts
- Built and maintained marathon-lb, the canonical load balancing and service discovery tool for Marathon and DC/OS

#### Airbnb, Inc., San Francisco, CA

Engineering

Feb 2013 – Jan 2015

Early employee at Airbnb. Joined the Data Infrastructure team to help Airbnb scale to support the massive growth of the company, and meet the company's needs for managing a large, growing data warehouse. Worked directly with teams all across the company to help meet their data needs, and build out a rich set of data tooling.

- Built next generation of data infrastructure utilizing open source tools such as Mesos, Hadoop, HDFS, Chronos, and Storm
- Contributed code to several projects, including: Mesos, Hadoop, Storm, Spark, Presto, Chronos, Marathon, and others
- Worked on early versions of Apache Superset (fka Airpal)
- Lead work on next generation of data processing tools, including Apache Airflow
- Lead an effort to improve data quality through the use of an automated verification system
- Coined our team motto of "Provably correct data"
- Gave a number of internal tech talks on emerging technologies at Airbnb

### Newfield Wireless, Inc., Berkeley, CA

Engineering

Sept 2009 – Nov 2012

Leveraged 3GPP layer 3 expertise to build a UMTS network data parser and indexer. Designed and implemented the first suite of real-time 3GPP LTE capture/parsing tools.

- Created a customized database solution with integrated flexible query language for accessing millions of streaming records in real time.
- Designed and implemented asynchronous communication library with feature set similar to ZeroMQ, with C++ and Python interfaces.
- Designed and implemented a reporting library for generating key performance indicators from vast quantities of raw data, leveraging previously mentioned customized database.
- Introduced new development and debugging methodologies to the team which significantly improved the pace of development and quality of deliverables.
- Assisted junior and senior developers on all aspects of software engineering.
- Oversaw design and implementation of schema-based XML software specifications.

Engineering 2003 - 2009

- Developed end user applications, web services, and embedded software.
- Involved in strategic planning, performance and productivity improvement, organizational design, e-commerce, new media and Internet promotion.
- Planned, participated, and coordinated team building exercises while demonstrating strong leadership skills.
- Configured and managed servers, automated backup systems, and provided support for customers as well as in-house support.
- Leveraged new technologies to enhance our product-to-customer experience in a timely and cost effective fashion.
- Implemented cost reduction IT strategy to make use of existing infrastructure instead of requiring further equipment purchases.

Programming Experience Languages: Rust, C, C++, Python, Ruby, Bash, Go, Java, Scala, Kotlin, IATEX Data Technology: Kafka, Cassandra, Redis, PostgreSQL, ElasticSearch/Lucene, MySQL, Hadoop, Hive, Presto, RedShift, BigQuery, SQS, EMR, RDS, Snowflake