



## Brenden Matthews

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### CONTACT INFORMATION

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### PUBLISHED WORKS

**Code Like a Pro in Rust**, Manning Publications, estimated fall 2023. ISBN 9781617299643.  
**Rust Design Patterns**, Manning Publications, estimated spring 2024. ISBN 9781633437463.

### 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 including Apache Airflow, Apache Kafka, Apache Superset, Apache Spark, Apache Mesos (PMC member), . Member of the Apache Software Foundation. Personally created a number of popular projects, with a few highlighted below:

**Conky**, C and C++ **6.4k+ stars**  
Endlessly configurable system monitor utility for UNIX systems.

**ThetaGang**, Python **1.7k+ stars**  
Equity options trading tool for capturing premium from theta decay. Designed for use with IBKR.

**dryoc**, Rust **200+ 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

**Braze, Inc.**, New York, NY

*Engineering*

**Oct 2018 – April 2019**

Building infrastructure with Kubernetes.

- 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
- 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

**D2IQ (fka Mesosphere), Inc.**, San Francisco, CA

## *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.

- 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     *Languages:* Rust, C, C++, Python, Ruby, Bash, Go, Java, Scala, Kotlin, L<sup>A</sup>T<sub>E</sub>X  
EXPERIENCE     *Data Technology:* Kafka, Cassandra, Redis, PostgreSQL, ElasticSearch/Lucene, MySQL, Hadoop, Hive, Presto, RedShift, BigQuery, SQS, EMR, RDS, Snowflake

AUTHENTICATION     The original source for this resume is available at [github.com/brndnmthws/resume](https://github.com/brndnmthws/resume). Use the contact email address at the top of this document or the one listed on my GitHub profile if you suspect shenanigans (such as fake candidates posing with my profile/details).