

# Arron Norwell

## Summary

A results-oriented engineer with expertise in building scalable distributed systems from zero to one, supporting millions of users. Experience with infrastructure platforms, performance, reliability, and leading teams in fast-moving environments.

## Skills

- Distributed Systems
- REST APIs and Platform Architecture
- Cloud (AWS, Google Cloud, Azure)
- Relational DBs (Postgres, MySQL)
- DevOps (CI/CD, CDK, Containers)
- Scalability and Performance Optimization
- Agentic AI Development Tooling
- Software Architecture and Design
- NoSQL (DynamoDB, Elasticsearch, Redis)
- OpenAPI, Protobuf

Languages: Java, Python, Rust, Scala, Ruby, Go, Typescript, Javascript

## Experience

Oct 2020 - **Senior Software Engineer, Amazon Web Services (EFS)**, Boston, MA

- Present Designed and built distributed filesystem cross-region replication platform using Java, Python, and AWS CDK.
- Built end-to-end simulation system for fault-tolerant distributed systems, adopted by multiple teams to improve developer throughput and increase system resilience.
- Led agentic AI and GenAI coding adoption across EFS organization (50+ engineers), including tooling development, training, and coding agent supervision tools.
- Optimized platform performance achieving 4x throughput improvement; mentored team of 8 engineers.

June 2017 - **Principal Software Engineer, Datto**, Boston, MA

- Oct 2020 Initial engineer and technical lead on greenfield SaaS platform redesign using Scala, Elasticsearch, and ZFS. Platform supports millions of users and dozens of petabytes of data.
- Built reusable monitoring platform handling hundreds of millions of events daily; prototyped features including backup visualization and Azure Exchange restore.
- Provided architectural guidance and mentoring to three scrum teams; collaborated on product roadmap and technical direction.

Nov 2013 - **Senior Software Engineer, Datto**, Boston, MA

- June 2017 Built distributed backup system supporting 1M+ daily users using Ruby on Rails, Redis, PostgreSQL, Cassandra, and S3.
- Led 7-developer team delivering Office 365 Backup/Restore solution on schedule.
- Created open-source Cassandra client and API framework handling tens of millions of daily requests.

Apr 2012 - **Software Developer / Team Lead, mDialog (acquired by Google)**, Toronto, ON

- Nov 2013 Fourth engineer at Series A video streaming startup, eventually acquired by Google.
- Built distributed video streaming platform from zero to one in Scala/Java/C with REST APIs, scaling to 250K concurrent streams across 50+ machines.
- Open-sourced asynchronous Redis, HTTP, and ZeroMQ Scala libraries.

## Education

**M.Sc. Computer Science**, University of Toronto (2012) • **B.Sc. Mathematics/CS**, UBC (2009)

## Selected Projects

Open source: Claippy (Rust GenAI CLI coding tool), CassSchema, Pyper • Personal: anorwell.com, SNPReporter (Rust genetic analysis)