Andrew **Hawker**

andrew.r.hawker@gmail.com | (929) 242-9537 | Seattle, WA | https://andrew.hawker.io

Experience

Routegy
Seattle, WA

Co-founder
Aug 2019 – Present

- Responsible for product direction/ideation, system architecture, backend development, devops, outbound sales, graphic design, and technical writing.
- Languages: Python, HCL, Javascript
- Technologies: Django (DRF), Vue.js (Nuxt), Terraform, AWS (ECS Fargate, S3, RDS, SNS, SES, Lambda, DynamoDB), Postgres, Auth0, Snowplow

Apptentive
Seattle, WA

Senior Engineer > Platform Lead
Jan 2017 – Aug 2019

- Operational support and pager rotation (24-7/7) for system receiving ~30B req/month (AWS, Kubernetes, ELK, Datadog, PagerDuty).
- Design/implement product analytics features (DAU/MAU, retention tracking, popular times) using theta sketches (Druid, Scala, Akka).
- Design/manage S3 data lake. Perform 100TiB backfill to Druid for analytics features (Druid, S3, EMR Hadoop) and plan/execute zero downtime migration of ~6B document collection from MongoDB to Cassandra (Debezium, Kafka).
- Streaming CDC system for MongoDB/Cassandra replication on 100k qps system (MongoDB, Cassandra, Scala, Debezium, Python).
- Save thousands/month in AWS spend with high traffic API redesign/caching (MongoDB, Cassandra, Rails).
- Implement document scoring for significant phrase detection (Sinatra, Elasticsearch, Python).
- Salesforce Service Cloud integration for Apptentive Message Center (Rails, MongoDB, Apex).
- Champion org wide code/design/deployment standards.
- Redesign the technical interview loop. Perform dozens of technical phone screenings and on-site interviews.
- Languages: Scala, Ruby, Python
- Technologies: Rails, Sinatra, Akka, Kubernetes, Druid, MongoDB, Cassandra, Redis, Kafka, Postgres, Travis CI, Jenkins, Hadoop, Debezium, AWS (EC2, S3, RDS, EMR), Auth0

Amazon Web Services
Seattle, WA

AWS Device Farm
Sept 2014 – Nov 2016

- Rebuild and redesign AppThwack for AWS. Train AWS engineers on product space, mentor interns, and domain expert for Android, iOS, and test-framework related inquires; hands-on customer support through forums, tickets, and emails.
- Collaborate with datacenter hardware engineers to design and patent new mobile device lab architecture.
- Envisioned and led implementation of features such as rule-based device pools, hierarchical result views, custom result log file format, and container integration.
- Designed and developed an easily extensible framework used by all other developers for adding new test framework support.
- Sole developer for all twelve of AWS Device Farm supported test frameworks (Appium, Calabash, XCTest, Espresso, etc).
- Envisioned, designed, and fully developed a novel hierarchical file format for storing time-ordered, test-framework agnostic test execution results (log files, test results, screenshots, videos, perfomance data, etc).
- Develop low-level tools for executing iOS tests on Linux.
- Languages: Python, Java, C
- Technologies: Android, iOS, AWS (EC2, S3, SWF, RDS, DDB), Sqlite, Postgres

AppThwack
Portland, OR

Senior Engineer
May 2013 – Jul 2015

- Build physical device lab for hundreds of mobile phones/tablets and manage it on a daily basis.
- Built automated/reproducible local dev environments used by entire engineering team.
- Full stack development, devops, on-call 24/7/7.
- Built official AppThwack API language bindings (Python/Java), Jenkins CI plugin (Java/Jelly), and Gradle/Android Studio plugin (Java/Groovy).
- Perform customer on-site training and daily hands-on customer support through Uservoice/Email/Phone.
- Languages: Python, Java, Node.js, Bash
- Technologies: Nginx, UWSGI, Redis, Postgres, S3, New Relic, Mailgun, Angular, Vagrant, Ansible

Intel
Hillsboro, OR

Software Engineer
May 2010 – May 2013

- Lead developer for a 'Continuous Integration as a Service' platform composed as RESTful web services.
- Designed & developed distributed automation framework used to test Intel wireless products.
- Designed & developed pluggable Bluetooth automation library that supported Intel, Windows (XP/7/8), Motorola (XP/7+), Broadcom (Widcomm), and Bluez stacks.
- Designed & developed libraries to control iRobot Create (roomba) robots for autonomous pathing.
- Languages: C#, Python, C++, VBScript, JScript
- Technologies: .NET, Bluetooth

Projects

adbpy
Android Debug Bridge (ADB) in pure python — *https://github.com/adbpy*

kettle
Kademlia Distributed Hash Table (DHT) implementation — *https://github.com/ahawker/kettle*

microsync-ci
GitHub App to keep your repositories in sync automatically — *(closed source)*

probot-py
GitHub Probot framework in Python — *https://github.com/flyingdice/probot-py*

ulid
Universally Unique Lexicographically Sortable Identifier — *https://github.com/ahawker/ulid*

Education

Northern Michigan University — *Marquette, MI*
BS in Computer Science, Cum Laude — *2006 – 2010*