

Robert Hwang

Software Engineer

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Relevant Experience

Software Development Engineer @ Amazon

May 2020 — Present | Seattle, WA

- ➔ Migrated multiple Junit4 tests in an Android APK package to use parameterization, cutting line usage in our testing codebase by more than 60%
- ➔ Internationalized Show and Tell, a camera enabled application to identify items within the Amazon catalog using Alexa, to new locales including Canada and the UK
- ➔ Spearheaded a migration plan to move Show and Tell onto a more modern, scalable, and cost effective architecture utilizing AWS Lambda and Kinesis

Software Engineer, Campaigns @ Attentive

March 2019 — Present | New York City, NY

- ➔ Wrote robust, performant backend microservices, primarily in Java and Python to power the core product and integrate with the core message sending platform
- ➔ Communicated and collaborated with stakeholders, product managers, and designers on architecting technical solutions to complex features and product challenges
- ➔ Migrated a legacy ETL process onto a serverless architecture, cutting average processing time by 94%, with robust error handling and incident recovery processes
- ➔ Architected and wrote an event driven video transcoding pipeline on AWS, using S3, Lambda, MediaConvert, and DynamoDB to automate the transcoding process of uploaded MP4 files into HLS

Platform Engineer + Apache Airflow contributor @ Astronomer

August 2018 — February 2019 | Cincinnati, OH

- ➔ Greatly improved the Apache Airflow on Kubernetes resource and state monitoring stack by deploying a service to communicate with the Kubernetes API
- ➔ Built an Elasticsearch log handler in Apache Airflow to improve the efficiency and uptime of the platform by removing the need for persistent worker storage

PROJECTS

New York Times Top News

Web application built with React and the NYTimes API, deployed on Heroku for visualizing current top articles in a boxed layout, by section

Cheetah

Web application built with Django, with a fully implemented user authentication system to authenticate Spotify users and import their playlist data into a Postgres database

Skills

Programming Languages

Proficient: Python, Java, SQL

Familiar: Javascript

Libraries & Frameworks

Pytest, JUnit

Tools and Platforms

AWS, Apache Airflow, Docker, Protocol buffers, PostgreSQL, MySQL

Knowledge & Experience

API Design, ETL processing, Microservices, Scripting

Education

Swarthmore College

2014 — 2018 | Swarthmore, PA

B.A in Computer Science

Minor in Biology

Awards and Recognitions

Howard Hughes Research Grant

Lande Research Award

Sigma Xi Research Society

Interests & Hobbies

Video editing, piano, music composition, running, writing, tennis