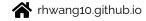
# **Robert Hwang**

# Software Engineer

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## **Relevant Experience**

## Software Development Engineer @ Amazon

May 2020 — Present | Seattle, WA

- → Implemented and released generic Alexa voice request routing across a complex distributed system to facilitate the internationalization of Show and Tell, a camera enabled Alexa application to identify items, to multiple new locales
- → Promoted good coding practices and code hygiene in the codebase, by rewriting unit test cases to use parameterization, greatly increasing code coverage across multiple libraries and increasing test case visibility

## Software Engineer @ Attentive

March 2019 — May 2020 | 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 clickstream and analytics ETL system onto a distributed serverless architecture, cutting average processing time by 94%, and supporting over 2000 transactions per second, with robust error handling and incident recovery
- → Architected, implemented, and deployed 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

## Software Engineer @ Astronomer

August 2018 — February 2019 | Cincinnati, OH

- → Improved the Apache Airflow on Kubernetes resource and state monitoring stack by deploying a service to communicate with the Kubernetes API
- → Contributed an Elasticsearch log handler to the Apache Airflow open source project
- → Used the log handler mentioned above to implement a live log streaming and search tool in the Cloud product

## **PROJECTS**

# New York Times Top News Dashboard Link

News web application built with React and the NYTimes API, deployed on Heroku

# ElsaBot Link

Discord application, built using Python and Discord's API, deployed on Heroku. Logging and observability is deployed as a separate app, using fluentD as a log aggregator

#### **Skills**

## **Programming Languages**

Python, Java

#### Libraries & Frameworks

Pytest, JUnit5, React

#### **Tools and Platforms**

AWS, Apache Airflow, Docker, PostgreSQL, MySQL, AWS Lambda

#### **Knowledge & Experience**

API Design, Data pipelines, Microservices, Scripting, Unit testing, ETL design, NoSQL

#### 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, riddles and word puzzles