

HAOTIAN ZHOU

Software Engineer @ Amazon | MSAIL Alumni @ CMU

@ haotian2@alumni.cmu.edu 412-708-3839 Seattle, USA <https://www.linkedin.com/in/haotian-zhou/>

EXPERIENCE & PROJECTS

Amazon

Jul 2020 - Present

SDE Fulltime

Seattle

Seller Level CIV¹ for Amazon.in
Provide CIV estimates for more than 120,000 sellers in India separately

- Build entire data pipeline from ... to automated the pipeline based on AWS Step Function in Python
- Design redshift table; implement ETL jobs in hql and scala to load data via EMR
- Refactor RESTful Service API to support seller-level granularity. use cache to increase ...

CIV Data Pipeline Infrastructure Optimization
Greatly improved the performance, reliability and scalability of internal systems

- EMR-DDB Migration : DynamoDB import via EMR, 7 times faster
- Lambda Function support, NAWS migration, get rid of hosts, severless

Contribution Profit Boost Pipeline Automation
Reduced manual operation by 80%. Shortened the entire process from 1 month to 5 days

- Coordinate & implement this automated pipeline across multiple teams(...)
- use S3, StepFunction, Pandas, save 70% of manual works during this process

Amazon

May 2019 - Aug 2019

SDE Intern

Seattle

CIV Backend 2.0 Prototype
Designed and implemented extendable Data pipeline backend built fully on Native AWS

- Built data pipeline backend with centralized workflow control based on AWS Step Function
- Developed new features by integrating multiple AWS Services : Lambda Function, CloudWatch, SNS, EMR

Carnegie Mellon University

Jan 2020 - May 2020

Capstone Project

Pittsburgh

Chatbot to Chatbot QA system
Automated chatbot that can make outbound call to IVR² system, answer IVR² questions & transfer call back to human

- Integrated with Twilio APIs to make outbound / inbound call and get audio streams
- Integrate with Google Cloud Speech-to-Text API to transcribe audit stream in real-time
- Applied NLP technologies to detect questions, search & build answers according to information stored in database
- Sponsor Scholarship Winner

¹CIV : Consumer Instock Value, an economic concept that evaluates long-term impact of a retail offer instock status change
²IVR: Interactive Voice Response System

CAREER OBJECTIVE

AREA OF INTEREST

Software Development

NLP

Cloud C

Data Engineering

Machine Learning

Deep Learning

TECHNICAL SKILLS

Python

Java

C

Scala

JavaScript

Apache Ant

SQL & HQL

AWS

Git

Spark & Hadoop

DeepLearning

NLP

Distributed System

PERSONAL SKILLS

Quick Learner

Teamworking

Work w

EDUCATION

M.S. Artificial Intelligence

Carnegie Mellon University

2018-2020

GPA: 3.95

B.E. Computer Science

Harbin Institute of Technology

2014-2018

GPA: 3.75