Hamza Azeem

SOFTWARE ENGINEER

hamzaazeem1@gmail.com | azeem.ca | linkedin.com/in/hamzaazeem | 650-426-8350

PROFESSIONAL EXPERIENCE

Amazon Search | Software Engineer

[Search ML Platform] - Scala • Java • Python • AWS   Aug. 2018 – Present

- Enabled fine-grained model training & analysis by creating Amazon Search's first low-latency, hourly-attributed dataset for customer shopping behaviour
- Reduced marketplace onboarding resource costs by 55%—developed Amazon Search's centralized marketplace datastore & automated onboarding system
- Reduced schema-change related compute + labour costs by 90% for core dataset by introducing Avro, optimizing core MapReduce logic & migrating to AWS
- Eliminated manual labour cost for servicing thousands of GDPR requests by leading & designing GDPR world-wide automation project for Amazon Search
- Mentored intern through project of shipping a full-stack data debugging tool used by thousands of engineers/analysts across Amazon & attracted them back for full-time

[Visual Search Platform] - Python • Java • R   Aug. 2017 – Dec. 2017

- Developed Visual Search team's first machine-learned relevance rankings model for most frequent query-type in Amazon's camera search: barcodes
- Final iteration increased barcode match rate by 14% after deployment, exceeding S-Team (SVP) goal expectations

[Visual Search Platform] - Python • AWS   Aug. 2016 – Dec. 2016

- Designed & launched a near real-time ingestion pipeline & its API that reduced data ingestion delays from 3 days to 2-5 seconds
- Developed backend service for near real-time addition/correction/deletion of Amazon items from the Visual Search catalog through barcode search-keys

Ultimate Software | Software Engineer   Jan. 2016 – Apr. 2016

Java • ElasticSearch • Logstash • Kibana • SQL • Android

- Owned research project for near real-time log management & analytics for entire TouchBase app's admin & Android systems
- Allowed streaming of 100k+ logs on a single cluster under 1s search times

Oracle | Software Engineer   May 2015 – Aug. 2015

Java • JavaScript • Chrome API

- Designed, owned, & shipped new Oracle product (a Chrome extension) under 3 months
- Prospect-hunting app gained 2,100+ active users since product launch
- Won best project at Marketing-Cloud hackathon + presented at OpenWorld Las Vegas

OTHER WORK

EyeDrone

[Capstone Project] - A.R Drone • JavaScript • Node.js • Microsoft Azure • OpenCV

Real-time traffic sign tracking on drone camera using image localization algorithm inspired by Simulated Annealing optimization

LANGUAGES

- Java
- Python
- Scala
- JavaScript
- SQL

TECHNOLOGIES

- Git
- AWS
  EMR/S3/Glue
  EC2/IAM/Athena
  SQS/SNS + more
- Linux
- Hadoop

EDUCATION

University of Waterloo
B.A.Sc in Computer Engineering
2013 – 2018

Relevant Courses

- Fuzzy Inferencing Systems & AI
- Distributed Systems
- Operating Systems
- Compilers
- Databases
- Computer Networks

INTERESTS

- Travel
- Writing
- Beatboxing
- Fashion