SUMIT BALANI

Software Engineering 4A 2017 | balanisumit@gmail.com

Skills

- Strong knowledge of the technical web stack, SDLC, Test Driven Development, GoF design patterns

Languages	Highly skilled with **Java** Experience with SQL, C++, Python, Pandas, JavaEE(Spring), JavaScript,HTML&CSS, JSP
Tools and Software	Git, Maven, Eclipse, MySQL, Vertica, AWS DyanmoDB, RedShift, S3, EC2

Work

A9.com (Amazon Search) Sept - Dec 2016

- Implemented fully distributed document store metrics which are logged for every document in Amazon Product Search, run daily during XDF-Merge and XDF-Export jobs.
- Designed and developed a distributed S3 bucket garbage collector job which runs periodically to clean up document spills that occur during indexing.

Amazon (AWS Kinesis) Jan - May 2016

- Designed and developed HealthCheck monitoring fleet to record the health of backend servers (Java, Spring)
- Implemented sample streams feature allowing customers to experience full application workflow without having to create personalized kinesis data stream

Reputation.com (Analytics) May - Sept 2015

- Responsible for Reputation Score and Weighted Rating components on scoring API (Python/Pandas)
- Improved total scoring algorithm run-time from 40 to 3 hours, run for 150,000 clients daily; Modified codebase to precompute all aggregation data and cache locally along with views created daily during ETL

ClearServe Financial Sept - Dec 2014

- Implemented soft-delete and bulk-upload features on accounting API for multiple services (Java, MySQL)
- Effected a 20% increase in bulk upload speeds for clients with upward of 1,000,000 transaction entries; Migrated ~1/5th of business logic from SQL queries into separate Java Library

Symcor Jan - May 2014

- Created new cheque search functionality in Java on the Symcor-TD bank web prototype
- Developed and managed front-end prototypes for 4 banks simultaneously

Projects

Concurrent Vending Machine

- Developed soda factory and vending machine simulation using concurrency concepts in micro-C++
- Worked on leveraging mutual exclusion and synchronization points, in order to allow concurrent processes to handle bank deposits & withdrawals, soda production, delivery and orders

Scribbly

- Lead developer on team of 4, programmed robot to capture images of convex polygons and trace onto paper
- Utilized Python Image Library (PIL) and implemented a version of the Harris corner detection algorithm

Education

University of Waterloo - *Candidate for Bachelors of* Software Engineering *(Class of 2017)*

Courses - Databases, Concurrency, Operating Systems, Software Design & Architecture, User Interfaces