#### AKASH GUPTA

512-201-0228 | akash.gupta@sjsu.edu | 2913 Pescadero Terrace, Fremont, CA- 94538 | LinkedIn | GitHub

### **OBJECTIVE**

Seeking a challenging full-time position in software development.

### **EDUCATION**

Masters, Software Engineering San Jose State University CGPA: 3.90/4.0 **Expected May 2019** 

Relevant Coursework: Distributed Systems, Cloud Computing, Large Scale Analytics, Virtualization Technologies.

Bachelors, Information Technology AKGEC, Ghaziabad CGPA: 3.58/4.0 Jun 2010 – Jun 2014

Relevant Coursework: Database Systems, Data Structures & Algorithms, Recommendation Systems.

### TECHNICAL SKILLS

Languages Java, JavaScript, Python, C, Go, HTML5, CSS, PL/SQL, XML

• Frameworks Node.js, React.js, Redux, Express.js, AWS, Passport.js, jQuery, JMeter, Mocha, Twitter

Bootstrap, Selenium, Apache Kafka, JWT, Spring Boot, Apache Camel, Apache Spark,

**TestNG** 

Operating Systems Windows, Linux, Mac OS X

Databases
SQL Server, Oracle 11g, MySQL, MongoDB, SQLite, DB2, Redis, Riak, Cassandra

Virtualization Docker, Amazon Web Services (AWS), Heroku

#### PROFESSIONAL EXPERIENCE

### Walmart Labs (Software Engineer Intern)

June 2018 – Aug 2018

- Significantly improved response times of catalog REST API endpoints using advanced Java 8 primitives like parallel streams, ForkJoin etc.
- Implemented business rule-engine using Apache Camel and Drools to trigger relevant workflows in the shared item setup platform.
- Implemented data pipeline to pull data from legacy DB2 database, published denormalized data to Kafka message bus and persisted the data in Cassandra.

# **Tata Consultancy Services (Systems Engineer)**

**Sep 2014 – June 2017** 

- Developed an Extract, Transform, Load (ETL) batch job to enrich ecommerce product catalog for US based client, CVS Pharmacy.
- Implemented master-slave replication using Oracle GoldenGate topologies, to achieve load balancing and high availability across multiple data centers for the main relational database.
- Learned database techniques like index based query optimization and schema design using entity relationship diagram (ERD).

## **SOFTWARE PROJECTS**

## **Prototype of Kayak**

Mar 2018 – Apr 2018

- Architected a highly scalable MERN stack web application to search and book flights, hotels and cars.
- Implemented business intelligence and reporting dashboards using react-chartjs-2.js to monitor sales and derive insights from recorded user activities.
- Used Apache Kafka for near real-time ingestion of user activity event data in background processing jobs.
- Persisted sales transaction data in MySQL and rich flight, hotel, car data in MongoDB collections.

#### VR-Tube

Mar 2018 – Apr 2018

- Created a web platform where users can create, share and participate in virtual reality experiences.
- Used A-Frame for setting up the VR experience, Node.js as the backend server, MongoDB and MySQL as the backend databases. Used JSON Web Tokens (JWT) for session management.

## **Multi-tenant Starbucks Application**

Feb 2018 - Mar 2018

- Developed a fault tolerant cloud-scale web application with front-end hosted on Heroku, Kong API Gateway to route requests and backend micro-services hosted on Amazon Elastic Container Service (ECS).
- Created a 5-node MongoDB cluster with master-slave replication to make the system highly available and eventually consistent even in case of network partition.

# **Prototype of Dropbox**

Aug 2017 – Oct 2017

- Developed a Dropbox prototype with features like file management, user authentication, user activity tracking etc.
- Used MySQL in backend and designed the database schema using entity relationship diagram (ERD) principles.
- Implemented REST API endpoints using Express framework and built the frontend using React.js and Redux.

# **Connection Pooling**

Aug 2017 - Oct 2017

- Developed a JavaScript connection pooling library to reuse connections and improve application performance.
- Used synchronization primitives like counting semaphores to control access to the connection pool.