# **Komal Garg**

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#### **EDUCATION**

University of Massachusetts Amherst, MA, United States

Master of Science in Computer Science

College of Engineering, Pune, India

Bachelor of Technology in Information Technology

## **TECHNICAL SKILLS**

Languages & Frameworks: JAVA, C, Scala, SQL, GO(Beginner), AJAX, Spring Boot, Docker, Jenkins, Apache Camel, Eclipse link

JPA, Google Protobuf, Mockito, Flink, Kafka, Kubernetes, JaCoCo, Helm Charts, Maven, JDBC

Database: SQL, MySQL, Oracle, PL/SQL, PostgreSQL, H2

**Application Software**: Postman, Gitlab, SonarQube, AWS, Grafana, Tableau, Kibana, Elasticsearch, Android Studio.

**Distributed Systems**: Apache Spark, AKKA Actor System, Elastic Map-Reduce.

Web Technologies: HTML, CSS, JavaScript, Knockout JS, TypeScript

#### **WORK EXPERIENCE**

### HERE Technologies, Mumbai - Software Engineer 2

June 2019 - Present

**Expected Graduation: Summer 2022** 

**Graduated: May 2017** 

- Formulated streaming pipeline which builds metrics corresponding to the quality of data coming from various input services and deliver strategy business KPIs
- Built Tableau dashboards to render map features and corresponding metrics providing the visual feedback-loop resulted in decreased troubleshooting time by around 60%
- Automated the deployment of Flink Pipelines and RESTful services on Kubernetes using Helm charts and Gitlab Pipeline leading to minimal manual intervention during CI/CD stage
- Improved the performance of microservices by 30% through tuning memory and CPU parameters
- Added functional metrics within Flink operators which provides real-time updates of the streaming pipeline
- Secured services by adding HERE API Gateway as the entry point which restricted direct microservice calls
- Implemented a Snapshot application using **AKKA Actor system** which incrementally captures map data from **MySQL** database to internal datastore which is then used to validate data correctness

#### Oracle Financial Services Software Limited, Mumbai – Associate Application Developer

July 2017 - May 2019

- Increased Code coverage of payments module by 68% through writing **JUnit** test cases
- Built REST APIs in Java using Eclipse Link framework for Limits module including the features which allow users to set custom limits for weekly or monthly transactions
- Integrated Oracle Banking APIs with host services by implementing **adapters and clients** using **Apache Camel Framework** within two weeks resulted in quick delivery of MEED project
- Designed Wireframe and programmed screens and components for Limits module based on Model-View-ViewModel framework using KnockoutJS and Typescript
- Developed **Alert framework** for processing different types of notification post financial and non-financial transactions
- Generated a generic framework for handling variable number of query parameters(q-query) while invoking RESTful APIs

#### HSBC Financial Services Holdings Company, Pune – Software Developer Intern

April 2016 - May 2016

 Constructed a web application "Desk Booking System" through which end-users can book desks, meeting rooms, and conference rooms as well as can check the status of their bookings

#### **PERSONAL PROJECTS**

## **Stock Trading System**

Fall 2019

- Engineered web-services which facilitate the user to trade stock online and keep track of their transactions
- Streamlined APIs for Administrator to onboard members and monitor fraudulent transactions

## **Icicles Game**

Spring 219

- Created a cross-platform 2D game where the player must save himself from icicle drops falling from top of the screen
  and maintained three difficulty levels depending on frequency and speed of falling Icicles
- Implemented best score features
- Tools Used: JAVA, Android Studio, Application Engine libGDX

## AWARDS & EXTRACURRICULARS

- Winner of Carrom Championship, 2018 held in Oracle
- Second Runner up in HackTron, 2019 a seven-hour extensive hackathon organized by DBS Bank (Total team 89)
- Led Infrastructure Team in Mindspark, 2016 an annual technical event of COEP
- Participated in multiple Trade shows as Exhibitor of product and received an overwhelming response from customers