Komal Garg

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EDUCATION

University of Massachusetts Amherst, MA, United States   **Dec '22(Expected)**
Incoming student for Masters of Science – Computer Science (Starting in Jan'21)

College of Engineering, Pune, India   **June '13 – May '17**
Bachelor of Technology in Information Technology

TECHNICAL SKILLS

Languages & Frameworks: JAVA, C, Scala, SQL, GO(Beginner), AJAX, Spring Boot, Jersey, Docker, Jenkins, Apache Camel, Eclipse link JPA, Google Protobuf, Mockito, Flink, Kafka, Kubernetes, JaCoCo, Helm Charts

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

Application Software: Postman, R Client, Gitlab, SonarQube, AWS Web Services, Graffana, Tableau, Kibana, ElasticSearch.

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

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

PROFESSIONAL EXPERIENCE

HERE Technologies, Mumbai – Software Engineer 2   **June' 19 – Present**
- Designed and Implemented an end-to-end **Streaming pipeline** which builds metrics related to the quality of data coming from various input sources.
- Built **Tableau** dashboards to render observable features onto a map to provide a visual feedback-loop of services.
- Automated the deployment of **Flink** Pipelines and Rest Services on Kubernetes namespaces using **helm charts** and used **terraform** scripts to deploy services on **AWS Cloud**.
- Improved the performance of microservices by 30% by tuning memory and CPU parameters. Also added functional metrics within operators to live monitor streaming pipelines through **Graffana.**
- Designed framework for supporting authorization and authentication of services with HERE API Gateway.
- Implemented a Snapshot application which incrementally captures map data from MySQL database to internal datastore using **AKKA Actor** system and **Scala.**

Oracle Financial Services Software Limited, Mumbai – Associate Application Developer   **July' 17 – May' 19**
- Increased Code coverage of payments module by 68% by writing **RUnit** test cases.
- Building REST-based web service in **Java using EclipseLink framework** for Limits module in Oracle Banking Digital Experience (OBDX) product.
- Coded scripts to quantify and monitor the number of calls made to any API.
- Designed Wireframe and developed 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.
- Designed a generic framework for handling variable number of query parameters(q-query) while invoking **RestFul APIs.**

HSBC Financial Services Holdings Company, Pune, India – Software Developer Intern   **April' 16 – May' 16**
- Developed a web application "Desk Booking System" through which end-users can book desks, meeting rooms, and conference rooms and can also check the status of the same through UI. Used **Postgres** as persistent storage.

RECENT PROJECTS

Currency Trading System
- Designed and developed Restful services for the user to see real-time data conversion rates amongst currencies of different countries and can book a specific conversion rate for trade. Additionally, design services for Administrator to approve or reject a trade transaction.

Icicles Game
- Developed cross-platform 2D game where the player must save himself from icicle drops falling from the top of the screen. Also, maintained difficulty levels and best score features.
- Tools Used: **JAVA, Android Studio, Application Engine Libgdx.**

AWARDS & EXTRACURRICULARS
- Winner of Women's Carrom Championship, 2018 held in Oracle.
- Second Runner up in HackTron, 2019 - a seven-hour extensive hackathon organized by DBS Bank (Total team – 89).
- Contributed to "geeksforgeeks.com" by posting optimal solutions to problems related to Stacks, Heaps and Arrays.
- Led Infrastructure Team in Mindspark, 2016 – an annual technical event of COEP.