# Sreeram Ganesan

linkedin.com/in/sreeramganesan
github.com/sreeram-gsan

Website: www.sreeramganesan.com
Email: srga8641@colorado.edu
Mobile: 720-803-8838

## EDUCATION

**Master of Science in Computer Science**                                     Expected May 2023
University of Colorado Boulder, Boulder, CO; GPA: 4/4

**Bachelor of Technology in Computer Science**                                     Jul 2018
Amrita School of Engineering, Amrita University, Coimbatore, India; GPA: 3.53/4

## SKILLS

**Languages:** Java, Scala, Python, Go, SQL, HTML, CSS, Javascript
**Frameworks/Libraries:** Spring Boot, Flask, NodeJS, React
**Databases:** Oracle, MySql, MongoDB
**Tools & Technologies:** RESTful Web Services, Microservices, Cloud Computing, Serverless, Git, Gradle, Jenkins, Docker, Kubernetes, Terraform, gRPC, Redis, Linux, JAX-RS, Hadoop, Map Reduce, Spark, Functional Programming, GCP, AWS, Authentication, Load balancing, RabbitMQ, Kafka, eBPF, XDP

## EXPERIENCE

**Software Engineer**                                     Jun 2019 - Jul 2021
Oracle                                     Hyderabad, India

○ Achieved 3X performance gain by developing new microservices with Java to import and export large amounts of data via Excel and other third-party apps. Reduced server cost by 34% compared to the legacy implementation.

○ Led a team of three to prototype and construct a novel revenue forecasting solution. Worked closely with product managers to incorporate customer feedback and improved the forecast by 13%.

○ Increased productivity by 20% by establishing an automated API documentation process using Swagger plugins.

**Associate Software Engineer**                                     Jul 2018 - May 2019
Oracle                                     Hyderabad, India

○ Created RESTful APIs to configure, generate and export mission-critical reports for R&A, a data analytics tool used by restaurant chains such as Starbucks, Dunkin, KFC, etc to optimize sales, operation costs, inventory, etc.

○ Decreased the turnaround time for critical bugs by 41% by re-architecting the legacy modules and their build process.

**Project Intern**                                     Jan 2018 - Jun 2018
Oracle                                     Hyderabad, India

○ Devised a proof of concept for an internal framework to build mobile applications with the web development stack - HTML, CSS and Javascript, which cut down the development time of mobile apps by 45%.

## PROJECTS

**Accelerating the communication between Serverless functions using RDMA**                                     Ongoing

○ Serverless computing is becoming increasingly popular but it is mainly targeted for stateless functions that do minimal I/O and communication. The existing solutions to use Serverless computing for Stateful functions are not very efficient.

○ This project achieves high performance inter function communication by co-locating them on the same VM and by using RDMA when they are located on different VMs.

○ Tech Stack - Python, Shell scripting, Docker, Kubernetes, Apache Openwhisk

**Efficient data processing using eBPF XDP** ⬀                                     Aug 2021 - Dec 2021

○ Existing data-processing systems like Databases and Spark clusters process data at the application layer. There is a cost to move the data from the file system to the application layer to process them.

○ This project achieved better performance compared to the existing data-processing systems by processing data at the network layer instead of the application layer. This was done by injecting rules using eBPF at the XDP layer (which is at the kernel level), before the data packets are passed to the application layer.

○ Tech Stack - Go, eBPF, XDP, Redis, Kafka, Docker, Kubernetes

**F7 Fitness Hub - Social Fitness Network** ⬀                                     Dec 2020 - Jul 2021

○ Architected and developed mobile applications for a medium-sized gym to build a community for their clients to virtually participate in various workouts from their mobile.

- This project was responsible for supporting clients and generating 100% of revenue for the business during COVID-19 pandemic lockdowns.
- Tech Stack - Java, Spring Boot, MySQL, React Native.

**Revenue Forecasting with Machine Learning** May 2020

- Engineered a system to forecast the revenue of restaurants with Machine Learning. Engineered an ExtraTrees Regressor-based ML model that predicted the weekly revenue of restaurants with a mean absolute error of less than 15%.
- Tech Stack - Python, Flask, Tensorflow, Oracle JET, Oracle Database.

## ACHIEVEMENTS

**Felicitated by the Minister of Rural Development, Government of India** - Established a beneficiary management application for a government program. Constructed dashboards and reports to measure the impact of the program.

**Inspiration Award** - Awarded by Persistent Systems for winning the Smart India Hackathon 2017.

**Second Runner Up, Honeywell Hackathon** - Developed a chrome extension for personalised product recommendation.

## CERTIFICATION

**Oracle Cloud Infrastructure Foundations 2020 Certified Associate (08/2020)** - Oracle Testing ID: OC2032969. Score: 88%