# Saurabh Gaggar

Email: sgaggar1@asu.edu Address: 1715 E Don Carlos,213, Tempe, AZ

Phone: +1480-791-3804

# Education

## Master of Science, Computer Science

Spring 2021-Present

Arizona State University, Tempe | GPA: 4.0

CSE510:DBMS Implementation, CSE546:Cloud Computing, CSE511:Data Processing at Scale

# Bachelor of Technology, Electronics and Communication Engineering

2014-2018

National Institute of Technology Karnataka, Surathkal, India

SIG Head of Cipher (Computer Science SIG) at Institution of Engineering and Technology club

## Skills

- 2.5 years' work experience in Software Development with Java 8.
- RHEL Linux, Git, JIRA, Teamcity CI-CD; Software engineering with Agile
- Java 8, Distributed and Multi thread programming using thread pools, Executor interface, synchronization using java atomic classes; Functional programming interfaces.
- Full stack Web Development using spring boot, jQuery, MongoDB, Oracle, Hazelcast, Gemfire
- Cloud application development on AWS EC2, GCP GAE, Digital Ocean and administration.
- Apache Kafka, Storm, Spark, Zookeeper, integration and development with java.

#### **Experience**

## Citibank | Software Developer | Full Time

Aug 2018-Dec 2020 | Pune, India

- Build security layer on existing Gemfire cache grid in java, integrate with internal systems like LDAP, Kerberos and OAuth2 for authentication and authorization.
- Build, maintain Gemfire cache grid with multi node physical machines clusters in production in multiple geographical regions. Set up auto backup and failover pipelines. Involve and manage support teams and vendors.
- Design, develop a new architecture using distributed processing systems like Apache Storm and Kafka in Java 8 to increase throughput and provide horizontal scalability of QMA mail processing application, effectively tripling the old throughput.
  - Use MongoDB and Oracle as databases, Hazelcast as in memory cache.
- Develop internal Kafka Java API client, making it fail resilient by enabling multi-datacenter message replication and an intelligent client with auto-switching capabilities between different geographical regions.
- Demonstrate that a caching system with a lazy-loading design can be set up between Apache Geode and HBase for most efficient use of memory resources.
- Member of Technical Pillar of Citi Pune Campus

#### Citibank | Software Development | Intern

May-July 2017 | Pune, India

• Develop REST web application with java spring boot to track changes in software development by integrating various sources of information like git, build tools, CI tool and JIRA.

## **Projects**

## User preference sensitive database

- Extend Minibase Database engine, implement skyline operator and hash index features to support ranked user preference queries.
- Implement custom index,data file storage mechanism for clustered and un-clustered B+ Tree and Hash indexes

## **Autoscaling EC2 on AWS**

 Use AWS EC2 java API to develop multi-tiered autoscaling image processing backend on AWS, use SQS for message queue and S3 for storage.

# **Storage Optimizer**

 Build autoscaling PAAS based Web app using java 8 spring boot on Google App engine to integrate various cloud storage accounts like Google Drive, Dropbox into single space, provide sharded and encrypted storage.