## **Onkar Gagare**

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#### **EDUCATION**

#### Arizona State University, AZ, USA

01/2021 - Present

Master of Science in Computer Software Engineering | GPA: 4.0/4

Coursework- Software Design, Languages and Programming Paradigms, Software Agility

## Pune Institute of Computer Technology, Pune, India

08/2013 - 05/2017

Bachelor of Engineering, Electronics | GPA: 8.02/10

 Coursework- Data Structures and Algorithms, Fundamentals of Programming language, Object Oriented Programming, Computer Organization, Operating System, Soft Computing, Computer Networks.

### **SKILLS**

Languages: Java, Python, C++, C, Go, JavaScript.

Frameworks: Spring Boot, Node.js, Apache Kafka, Apache Spark, gRPC, Mockito, Django, Flask, Angular 6, React, Express.

Databases: SQL, PostgreSQL, MongoDB.

Tools / OS: Kubernetes, Docker, Jenkins, Git, AWS EC2, REST, Postman, Maven, Gradle, Linux, Windows.

Others: Design Patterns, Debugging, Test-driven development (TDD), Object Oriented Programming, Cloud Services.

#### PROFESSIONAL EXPERIENCE

# Cyr3con | Software Engineer Intern

03/2021 - Present

- Developed new modules using changelog decision tree and ML firewall to determine inclusion of CVEs.
- Contributed to feature enhancements for prediction models, improved performance by 15% using extensive testing.

# Bank of New York Mellon Technologies | Software Engineer

06/2017 - 11/2020

- Responsible for containerizing the banking applications using Docker and deployment on private cloud.
- Implemented OpenID Connect (OAuth 2.0) across several banking applications.
- Designed middleware and caching mechanism for faster data lookup. This reduced the response time by 34%.
- Built a server-side pagination module inorder to fetch 5000 entries for IBD REST API.
- Reduced search query time by 60% for the admin panel of the entitlement providing system.
- Implemented cache refresh using scheduler to improve the performance by 30%.
- Contributed to the system design, development, testing and delivery of enterprise applications.
- Enabled CSRF protection using Synchronizer Token Pattern, and enabled Cross origin Resource Sharing for REST API's.
- Designed and implemented automatic approval feature for all pending requests in the entitlement management system.
- Worked on revamping existing UI to Angular 6 and on backend performance upgrades for legacy banking application.
- Mentored 4 interns on microservice architecture and technical knowledge of applications, performed code reviews.

### **KEY PROJECTS**

#### Real-time crime statistics (Apache Spark Structured Streaming, Kafka , Python)

 Worked on a real-world dataset on crime incidents and provided statistical analyses of the data by creating Kafka server to produce data and ingest data using Spark Structured Streaming.

# Optimizing Public Transport (Apache Kafka, Apache Kafka Connect, REST Proxy, Python)

 Built a high-throughput, low-latency platform streaming real-time public transit status using Kafka. Ingested data from different sources using Kafka Connect JDBC Source Connector and REST proxy.

### Virtual Reality Headset (OpenGL, NumPy, Python)

- Created a virtual environment for VR Headset using OpenGL in Python, with cost upto 0.1% of market VR set.
- Processed real-time data from the sensors using NumPy libraries and rendered the virtual environment.
- Designed a complementary filter using Python for producing streamline output from distorted sensor data.

### Text to Speech Server (gRPC, protobuf, Go)

• Designed and implemented distributed servers using Go, used flite package to translate text to speech and gRPC for backend RPCs with protobuf for communication between client and the server. Hosted on GCE using Kubernetes clusters.

## Construction Management Application (Node.js, MongoDB, Express, REST)

Created an application which helps the workers at a construction site to manage their work and report their subordinates.
Developed the end-to-end architecture of the application and workflows according to the person's role.

#### **AWARDS AND ACHIEVEMENTS**

- Received 'Delivering and Driving Excellence' award for 2 consecutive years at Bank of New York Mellon for increasing scalability of the application and containerizing them.
- Received 'WOW' award for successful delivery of security vulnerabilities resolution in Entitlement Management System(EMS) project.
- 1st place, Bot Coding Competition at 'Impetus and Concepts', An intercollegiate state level coding competition.