

# OM SITAPARA

## SOFTWARE ENGINEER II

### DETAILS

**Phone:** 8849438726

**E-mail:**  
[omsitapara23@gmail.com](mailto:omsitapara23@gmail.com)

**Socials:**

 [LinkedIn](#)

 [GitHub](#)

### SKILLS

- ❖ C++, GOLANG, PYTHON
- ❖ OOPS
- ❖ MICROSERVICES
- ❖ REDIS
- ❖ SYSTEM DESIGN
- ❖ DISTRIBUTED SYSTEMS
- ❖ BLOCK-CHAIN
- ❖ COMPUTER NETWORKING

### ACCOMPLISHMENTS

- ❖ Secured AIR – 775 in IIT-JEE Advanced
- ❖ Runner up – Megathon 2k18  
Secured 2nd position in the EA games challenge in one of the largest hackathon in south India organized by IITH and IIITH.  
Made a 2-D multiplayer platform game using OpenGL, SDL, Winsock libraries and our own game engine.

### PROFILE

Forward-thinking Software Engineer with background working productively in dynamic environments. Fluent in C++, go and python programming languages. Proud team player focused on achieving project objectives with speed and accuracy.

### WORK HISTORY

#### Software Engineer II – MICROSOFT

*Jan 2022 - Current*

- Working in the team **Platform as a Service (PaaS)** team with **multithreaded environment** using **C++ and Golang**.
- Currently working with **codebase/Components** like ISTIO, ETCD, Kafka, Redis, Grafana, Prometheus and many more.
- Developed a **low latency C++ REDIS client library** used by all the applications to talk to the REDIS server in **synchronous or asynchronous** manner.
- Developed custom modules over **REDIS SERVER** to provide **ACID** transaction facilities. Also added multiple **resiliency features** like **GeoRedundancy, Life cycle management**.
- Design and build a **C++ based simulator and Rate limiter** for REDIS to test the performance & latency of the client library and server and benchmark it.
- Designed and build a **Golang based micro service** which exposes a **REST API** used by application teams to dynamically create CRO for ISTIO
- Handled the **complete security** of the product on Kubernetes using service mesh like ISTIO, and cilium and using native security mechanisms for databases like REDIS.
- Working with the micro service architecture and have goods hands on **Kubernetes and Docker** deployments.
- Experience **building & scaling concurrent, distributed and fault-tolerant** production services

#### Software Engineer – Arista Networks

*Jun 2020 – Jan 2022*

- Primarily worked with **C/C++ & Python** with an eye towards **OOPS principles**.
- Designed and implemented multiple **low latency** scheduling /shaping algorithms for the traffic management over the switch interface.
- Worked on a Scheduler Compensation feature from scratch and delivered it Bug free to multiple customers like VOCUS, Microsoft etc.

#### Software Engineering Intern – Arista Networks

*May 2019 – Jul 2019*

- Developed an automated **Python** debugging tool for the codebase to identify any potential issue **using monitoring, logging and state-machines**.

## Co-Curricular

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- ❖ Worked as a TA for: POPL (principle of programming languages), OS (operating systems), Computer Networks, Distributed Systems, Parallel and Concurrent programming.
- ❖ NSO football player for IITH
- ❖ Financial volunteer and coordinator for ELAN - NVISION IITH.

## OTHER EXPERIENCES

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### ◆ Open Source Developer – MATPLOTLIB

*Aug 2019 – Feb 2020*

- Participated in fixing the issues, completing feature requests and reviewing other developer's PR's.

### ◆ Blockchain Researcher – IIT HYDERABAD

*Aug 2019 – Apr 2020*

- Worked on increasing the efficiency and throughput of blockchains by adding concurrency to mining and validation phase using STMs (Software Transactional Memory Systems)

### ◆ Software Engineering – IIT HYDERABAD

*May 2019 – Jul 2019*

- Developed a platform SMFHCP - Social Media for Healthcare Professionals.
- This platform allows healthcare professionals to share general posts, case-study allows one-to-one chat and comment on post feature.

### ◆ Web/Android App Developer – Placement Cell IITH

*Sep 2017 – May 2018*

- Developed official website for placement cell IITH. This website was publicly hosted and used in real time by students, hiring companies and faculties for over 2 years.

## EDUCATION

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### ◆ B.TECH: COMPUTER SCIENCE AND ENGINEERING

*INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD (IITH) – AIR 775*

**CGPA: 8.6/10**

### ◆ GUJARAT BOARD – 12TH

*UTOPIA SCHOOL - AHMEDABAD*

**PERCENTAGE: 91.08%**

### ◆ GUJARAT BOARD – 10TH

*BVB'S NARMADA VIDHYALAYA – BHARUCH*

**PERCENTAGE: 91.83%**