

Swapnil Bhosale

swapnil.bhosale@umbc.edu | 410-900-3119 | LinkedIn: [Swapnil-B](#) | Github: [SwapnilBhosale](#)
4771 Belwood Green, Arbutus, MD

EDUCATION

University of Maryland Baltimore County

Master of Science in Computer Science

Baltimore, MD

Expected May 2021

University of Pune

Bachelor of Engineering in Computer Engineering; First Class With Distinction

Pune, India

Aug 2011 - June 2014

SKILLS

- **Programming Languages:** Java, Python, Rust, C, JavaScript, SQL, NoSQL, NodeJS, TypeScript
- **Technologies:** Spring-Boot, Machine Learning, Cloud(Azure, AWS), Docker, IoT, WebRTC, Android, System Programming, Arduino Uno, Sensors and Actuators

EXPERIENCE: 4 YEARS

Pratiti Technologies Pvt. Ltd.

Software Engineer

Pune, India

June 2018 - July 2019

- Devised & developed back-end services using cloud features, using **Serverless Computing and Kubernetes Clusters** for Siemens *MindSphere IIoT Cloud Platform*
- Researched & implemented **Azure Mock library in NodeJS**. So far Microsoft has not yet announced Azure mock library in NodeJS
- Explored & developed Spring-Boot libraries for Cloud Stream binders for **Azure Service Bus, Azure Simple Queue and Azure Logging and Monitoring** which was used by all the product lines in the product
- Involved, investigated and resolved various **production issues**
- Designed & adapted **Cloud Agnostic Solution** for the cloud IIoT platform. The objective was to devise a solution which has a single code base for Azure, AWS and Alibaba cloud platforms and it was achieved with my design
- **Finalist in the Siemens yearly Hackathon 2019**. Implemented Smart Trash Management System using **Cloud IIoT platform and Ultra Sonic sensor**. Integrated **Raspberry Pi over OPC-UA** with the platform for data transmission. Developed *Android App for route navigation using Google Maps API*

Xoriant Solutions Pvt. Ltd.

Software Engineer

Pune, India

September 2017 - June 2018

- Designed, lead & implemented SDK development for the communication platform. **Highly appreciated** by clients and product stakeholders for the simplicity and comprehensive documentation of the SDK in JAVA
- Demystified **Docker and Dockerized the Spring-Boot micro services**. Also configured the Bamboo CI/CD to use docker and wrote shell script to auto-configure the docker containers for Multi-Environment deployments
- Proposed a new system design and supervised the initiative. Re-factoring of the architecture was endorsed by the product manager and stakeholders. The goal of new system was to satisfy modular, less verbose, maintainable and testable paradigms of software engineering and were achieved

Great Software Lab Pvt. Ltd.

Associate Software Engineer

Pune, India

May 2015 - July 2017

- Researched & programmed *Machine Learning Algorithm* to solve energy savings problem of the client. The algorithm helped in **25% energy saving and overall 5% increased** in the productivity
- **Reverse Engineered projector** and controlled it using IR sender in the Hackathon. Moreover developed *full working Smart Office* concept in the stipulated 24 hr timespan
- Researched & implemented use cases in Avaya Breeze platform which *helped the organization becoming a Technology Partner* with the Avaya. Later, the use case was **demonstrated at the Avaya's Gitex Technology event at Dubai**
- Built & integrated OPC-UA protocol handler in the one of the IoT platform. This was *one of the best value addition* to the client product and was **highly appreciated** by them. Received **Pat On The Back Award** for my work

ACADEMIC PROJECT

- **RFID based Bus Tracking System Analysis:** Addressed the shortcoming of the GPS, Bluetooth, ZigBee in the context of Bus monitoring system. Presented a new solution, which was based on GSM and RFID's.
 - Researched, studied & compared available Bus Monitoring Systems and their pros and cons. Devised a new solution using **RFID's and GSM** which was cost effective and also solved the shortcomings of GPS and GIS.
 - **Technologies:** C, VB, Assembly Language, MiroController AT89S52, RFID tags and reader, GSM

ADDITIONAL CONTRIBUTIONS & ACHIEVEMENTS

- Contributed to JVM implementation in Rust
- Implemented CHIP-8 emulator
- Contributed to SFTP and TFTP implementation
- Programmed FAT file simulation in JAVA
- Contributed to the azure-function-express NodeJS library
- Contributed to experimental compiler for Tiger language using LLVM
- Won Avaya hackathon **Second** place 2017
- Won GSLab hackathon **Best Idea** Award 2016