Swapnil Bhosale

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EDUCATION

University of Maryland Baltimore County

Master of Science in Computer Science

Baltimore, MD Expected May 2021

University of Pune

Pune, India

Bachelor of Engineering in Computer Engineering; First Class With Distinction

Aug 2011 - June 2014

Proramming 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.

Pune, India

Software Engineer

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.

Pune, India

Software Engineer

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

o Proposed a new system design and supervised the initiative. Re-factoring of the architecture was endorsed by the product manager and stake-holders. 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.

Pune, India

Associate Software Engineer

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.
 - o 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.
 - o 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