

Swapnil Sunilkumar Bhasale

<https://www.linkedin.com/in/swapnilbhasale>

<https://github.com/swapnilbhasale>

580 8th Ave NE, Issaquah, WA 98029

Mob: +1 (352) 888 1002 | bhasaless007@gmail.com

Education

University of Florida, Gainesville, FL, USA

Aug 2016 – May 2018

Master of Science in Computer Science | GPA: 3.6/4

Birla Institute of Technology and Science, Pilani, Hyderabad

Aug 2011 - July 2015

Bachelor of Engineering in Computer Science | GPA: 7.09/10

Skills

Programming Languages: Python | Java | C# | C/C++ | .Net

Web Technologies: HTML | CSS | JavaScript | NodeJS | Spring Boot | Microservices | RESTful APIs

Platforms/Tools: Azure | Kubernetes | Docker | Power BI | Kafka | AWS | Google Cloud Platform

Database Systems: SQL | MongoDB

Employment

Microsoft | Redmond, WA

July 2021 – Present

Senior Software Engineer

Azure | Python | SQL | JavaScript | Kubernetes | Docker | Kafka | Machine Learning | DeepStream | MLOps

- Building end-to-end containerized edge AI solutions with NVIDIA DeepStream and deployed on Kubernetes for Arc-enabled services with Azure Kubernetes Service (AKS) and GitOps, from ML model training/inferencing on the device, communication to IoT cloud services to front-end web applications and visualization on Power BI dashboards.
- Designed and developed an edge AI solution to optimize order accuracy, table cleanliness, and people occupancy at Quick Service Restaurants (QSRs). Deployed an on-prem version via Azure Arc, AKS, GitOps and a version leveraging Azure Edge Zones.
- Developed vision and speech solutions on the Azure Percept Devkit using computer vision, speech-to-text, and Azure functions to enable Microsoft partners in creating Edge AI solutions.
- Built an automated long-haul validation infrastructure for Azure Percept Platform (Intel and NVIDIA hardware acceleration).

Lenovo | Morrisville, NC

June 2019 – July 2021

Cloud Engineer

Java | Spring | Microservices | RESTful APIs | C++ | Python | AWS | Azure | MongoDB | Kubernetes | Kafka

- Building scalable, responsive, and highly available microservices for Lenovo's Cloud Platform following industry-level standards and technical code reviews to ensure development for high-quality software.
- Developing APIs, and microservices to enable secure device management for Lenovo edge servers, content management for AR/VR devices, and user management for the Lenovo Cloud Platform.
- Presented at Microsoft Ignite '19, a demonstration showing data transfer from a Lenovo edge device (running Azure IoT edge, SQL DB edge) to a Lenovo edge server (running Azure Data Studio, SQL server) and created a Power BI dashboard from querying data in Azure Data Studio.
- Developed an external Developer Portal, which will provide users with reference to APIs, guides, SDKs, and tools to start using the Lenovo Cloud Platform in their applications.

Samsung Semiconductor Inc. | San Jose, CA

May 2017 – April 2019

IOT Applications Engineer

May 2018 – April 2019

Embedded C | C++ | Python | Linux | ARM | RTOS | ZigBee | Thread | MQTT | REST | Azure IoT | AWS IoT

- Experience working with Samsung ARTIK module equipped with ARM MCUs, networking, wireless radios, and full system software stack, running Linux Ubuntu or TizenRT.
- Developed embedded software and home automation applications in C and Python integrated with third-party ZigBee sensors, smart lights and the cloud utilizing the ZigBee stack.
- Produced technical documentation, user guides, web articles and application notes on detailed use of ARTIK modules with wireless standards: 802.11, Bluetooth, ZigBee, and Thread.
- Supported Enterprise global system integrators and large lighting equipment manufacturers in their product development by resolving technical issues, conducting troubleshooting, and debugging sessions.

Applications and Customer Engineering Intern

May 2017 – Dec 2017

- Increased outreach of the Samsung's end-to-end ARTIK platform by building an interactive digital display and showcased it at Samsung Developers Conference 2017.
- Published key developer documentation for a gateway application note utilizing the Silicon Labs ZigBee stack, demonstrating connections to third-party sensors and data visualization to the cloud.
- Set up a Thread mesh network to conduct tests on OTA updates and edge node manager for our customers.

Nokia | Bangalore, India

July 2015 - July 2016

Research and Development Engineer

TCP/IP | LTE | Routing | Networking | CI/CD | Agile | Test-driven development | Software Development

- Integration and verification for 4G LTE networks, experience working in an agile environment with test-driven development.
- Developed an automation framework (ROBOT) using Python.
- Simulated real-world scenarios to test QoS, IPSec, IP traffic measurement techniques, load balancing and power optimization for 4G LTE networks.
- To run the above simulations and testing, I used tools: IXIA, Packetstorm, Annue, and Juniper Strongswan.

Avaya | Pune, India

Jul 2014 – Dec 2014

Software Engineer Intern

C# | .Net | Python | Natural Language Processing | HTML | CSS | Software Development

- Built a web-based framework for test case writing and execution using C#, ASP .Net, Python and NLP, enabling testers to write/execute test cases. Created the user-interface using HTML, CSS and Bootstrap.
- The framework centralized the entire testing and integration process by collecting execution logs and produced execution graphs to denote test coverage. This tool is used by the Test team at Avaya.