


Anish Philip

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PROFESSIONAL EXPERIENCE

Graduate Research Assistant

May 2024 – present | Stony brook, United States

Secure Systems Lab (SBU)

- Developed an **NSF-funded full-stack framework** based on **Linux, C++, React, Redux & TypeScript** for creating web apps with **privacy policies**.
- Spearheaded the design and implementation of an **RBAC based no-code UX framework** for enforcement of data access policies.
- Built a real-time cell-level spreadsheet module for tabular data, similar to Google Sheets, with integrated CI/CD pipelines using Github actions.

Chief Engineer | Lead Engineer | Engineer

Jul 2017 – Aug 2023 | Delhi, India

Samsung

- Awarded **Employee of the Year at Samsung** out of more than 3000+ employees in 2019.
- Innovated a **patent-backed RBAC cloud security** platform providing 1-click single sign-on concurrent access to 1500+ cloud resources, utilizing Golang, Python, Angular, and Ansible, for 50+ Samsung Smart TV services.
- Pivoted infrastructure architecture to **serverless**, with automated Infra provisioning pipelines enhancing response times by up to 300%.
- Architected a global-scale **Security Hub with zero-trust** architecture, achieving 99.9% availability through micro-services, **FastAPI**, and the **ELK stack**, catering to **multi-cloud** (AWS, Azure, and GCP) access, using Terraform and Kubernetes, with a global roll-out across 10+ divisions.
- Engineered a **real-time Email Response Management System** for Samsung Customer Support, reducing response time to 1 day.

Full-Stack Software Engineer - Intern

May 2016 – Jul 2016 | Delhi, India

Oxane Partners

- Led ideation, design and full-stack development of an assessment platform with **MVC architecture in Java, Spring, Hibernate and AngularJS**, reducing code redundancy by 60%.
- Streamlined **XML and JSON data pipelines** through automation, in an existing financial portfolio management system, along with data structure optimization, **reducing processing times by 50%**.

EDUCATION

Stony Brook University

Aug 2023 – Dec 2024 | NY, USA

MS Computer Science (with specialization in Data Science)

- Machine Learning, Distributed Systems, Analysis of Algorithms, Network Security, Data Science (Skiena) **GPA 3.81/4**

Delhi Technological University (Formerly DCE)

Aug 2013 – May 2017 | Delhi, India

B. Tech in Software Engineering

- Operating System, Database Management System, Object Oriented Programming, Computer Network **GPA 9.1/10 (Top 3%)**

PROJECTS

CS Workflow (SBU | COMPAS LABS)

Jan 2024 – present



React | Node.js | GCP | Firebase

- Collaborated on a web application, successfully **digitizing 80% of the offline workflows** of the department.
- Leveraged Google Cloud Platform (GCP) for hosting and Firebase for backend services, **ensuring 99.9% availability and scalability**.
- Implemented online form filling and signing with Adobe PDF API, and **CI/CD pipelines** for automated testing and deployment , **reaching 1000+ students** and faculty.

Machine Learning and Data Science (SBU)

Aug 2023 – Dec 2023

Python | Pandas | PyTorch

- Quantifying Value/Significance of Place:** 
 - Evaluated the significance of a business obtained from novel features, evaluating the economic, customer, social, and infrastructure impact of a business, employing K-means, DB-SCAN clustering techniques.
 - Successfully validated ranking of businesses in districts of Queens, with **95.2% prediction accuracy** and deployed models using Docker.
- Financial Trading System (FTS) using Reinforcement Learning** 
 - Conducted a comprehensive analysis comparing state-of-the-art RL algorithms (Temporal Q-learning, LSTM, K-Line Clustering) to optimize profits, model parameters, and system efficiency, with **20% increase in revenue**.
 - Implemented **automated model evaluation pipelines**, ensuring consistent and accurate results using **zenML and MLflow**.

Cloud Security and Infrastructure Governance (SAMSUNG)

Jan 2019 – Aug 2023

Golang | Python | Angular | Postgres | MySQL | AWS | GCP | Azure

- Identity and Access Management:** Revolutionized infrastructure access and management for 100+ teams by achieving nearly **99.9% SLA** driven automation using Ansible and REST API (**made 100+ APIs**).
- Security Operations Hub:** Boosted infrastructure **resilience by 40% and scalability by 70%** by integrating advanced threat mitigation in firewall and package management with containerization, based on Python FastAPI, Ansible, and Kafka.

TECHNICAL SKILLS

- Languages:** Golang, Python, JavaScript, TypeScript, Java, C/C++, Bash, SQL, R, HTML/CSS
- Technologies:** Node.js, NextJS, Spring Boot, Angular, React, NestJS, GraphQL, REST, Kafka, OAuth, SAML, LDAP, Active Directory
- DevOps & Cloud:** AWS, Azure, GCP, Kubernetes, Docker, Git, CI/CD, Jenkins, Azure AD, Hashicorp Vault, Terraform, Ansible
- Databases:** MySQL, Postgres, MongoDB, DynamoDB, Amazon Redshift, Amazon RDS, Hadoop, Redis, Firebase

ACHIEVEMENTS

- Ascended through the ranks becoming **President- Computer Society of India (DTU)**, after roles such as Infrastructure Head, PR Head, Technical & Corporate Head and Joint Secretary over four years.
- Secured **All India Rank 1536** out of **1.5 million** candidates in Joint Entrance Examinations in India.