

EXPERIENCE

Interactive Brokers LLC

Greenwich, Connecticut

- Software Engineer

January 2024 - Present

Tech Stack: Python, Pandas, SQL, Flask, Django, Node.js, Vue.js, Go, Perl, Jenkins, Linux

- Designed and developed a full-stack application to generate legal and regulatory reports from millions of daily trades. Implemented using Flask for microservices, Django for the backend, and Vue.js for the frontend. This application is actively used by hundreds of analysts across the firm.
- Engineered a system that automates the updating of code repositories to the latest versions of frameworks. This service analyzes Python scripts, converts them to Abstract Syntax Trees (AST), performs necessary updates, and automatically creates Jira tickets and raises code reviews.

KLA Corporation

Milpitas, California

- Software Engineer Intern

May 2023 - August 2023

Tech Stack: C# .NET, JavaScript, Python, Flask, Linux, Object-oriented design

- Designed and implemented a new architecture for the [SensArray FOUP](#) software. The FOUP software is responsible for capturing temperature data during the manufacturing process of semiconductors and transmitting the data from the embedded hardware sensors to the automation server.

Goldman Sachs

Bengaluru, India

- Software Engineer

January 2020 - July 2022

Tech Stack: Java, Python, Node.js, PostgreSQL, Dropwizard, Angular, AWS, Jenkins, Docker

- Designed an automation system for the migration of **50,000+ software projects** to GitLab CI/CD, saving thousands of developer hours. Developed several Restful APIs using Dropwizard in Java and developed a dashboard in Angular that was used by **10,000+ developers** for seamless repository migration to GitLab.
- Developed an [automated software bill of materials \(SBOM\) generation tool](#) to track the dependencies of all the software projects across the firm. Contributed to the Dependency Track open-source project, which has over **1 million** downloads on Docker, by adding a crucial [no-proxy feature](#) feature essential for corporate network environments.
- Developed a service to enforce code reviews for merge requests from appropriate SMEs for all the sensitive code in the firm that has a **direct impact** on the company's finances. Created an automated tool for identifying the sensitive Python and Java code snippets from the developers' test cases.

L3S Research Center

Hannover, Germany

- Visiting Researcher

November 2019 - December 2019

Tech Stack: Python, TensorFlow, NumPy, Pandas, scikit-learn, METIS

- Worked with [Dr. Avishek Anand](#) on scaling Graph Convolutional Networks (GCNs) for large graph datasets. Explored and implemented the Cluster-GCN algorithm to leverage the clustering structure of graphs, resulting in improved performance and efficiency. Conducted experiments on diverse datasets, including Protein-Protein Interactions (PPI), Reddit, and Amazon2M, to validate research hypotheses.

Goldman Sachs

Bengaluru, India

- Software Engineer Intern

May 2018 - October 2018

Tech Stack: Java, Python, Angular, Hazelcast, Kafka, Spark, Hadoop, MongoDB, Terraform

- Built a data pipeline to monitor breaches in the SLOs of RESTful services during their runtime. Designed a multi-threaded service to fetch SLI intents of all products from a catalog API and implemented streaming and processing of the real-time telemetry of applications using Spark structured streaming.

EDUCATION

University at Buffalo, The State University of New York

Buffalo, New York

- Master of Science, Computer Science and Engineering; GPA: 3.95/4

August 2022 - December 2023

Coursework: Machine Learning, Parallel Algorithms, Quantum Computing

PSG College of Technology

Coimbatore, India

- Master of Science (5-Year Integrated), Theoretical Computer Science; GPA: 8.12/10

June 2015 - Sep 2020

Coursework: Algorithms, Graph Theory, Artificial Intelligence, Cloud Computing

TECHNICAL SKILLS

- **Programming Languages** : Python, Java, C/C++, C#, TypeScript, JavaScript, Bash
- **Web Development** : HTML, CSS, Bootstrap, Angular, Node.js, RESTful API development
- **Databases** : SQL, NoSQL, PostgreSQL, MySQL, SQL Server, MongoDB, Hazelcast
- **Technologies**: Dropwizard, Maven, Kafka, Hadoop, Spark, Flask, Docker, Kubernetes, Terraform, AWS, Prometheus
- **Tools & Methodologies**: Git, SVN, Jira, Confluence, Scrum, Agile methodologies, Shell Scripting, CI/CD, DevOps
- **Others**: Algorithms, Design Patterns, Object-Oriented Programming, MVC, Microservices, SDLC, Linux