

EXPERIENCE

Graduate Research Assistant

Rochester Institute of Technology

Aug 2022 — Present

Rochester, NY

- Supporting full-stack development for **NGAFID** by delivering **React** components, creating RESTful API in **Java**, modifying **MySQL** database tables, and contributing to multiple user facing features.
- Designed and implemented new 3D visualization page for displaying flight paths using JavaScript library like Cesium.js.
- Developed innovative analytics features utilizing flight data, leading to a 30% increase in user engagement.
- Assisting in applied machine learning and neuroevolution research for Distributed Data Science Systems Lab.

Software Engineer Intern

ESRI

May 2022 — July 2022

Portland, OR

- Developed and implemented automation scripts using Ansible to install **GitHub Action** runners on existing and new servers.
- Engineered efficient GitHub Actions workflows to automate the publishing of **Docker** images in a private docker registry, resulting in a 40% reduction in manual intervention and ensuring seamless continuous integration and delivery processes.
- Upgraded existing CI/CD pipelines for improving performance by 30% and fixed security related issues by integrating Vault secret storage engine.

Associate Consultant

Capgemini

Feb 2019 — July 2021

Mumbai, India

- Developed in **Spring Boot, Java, Angular, MySQL** to meet design specifications and user requirements to deliver high quality applications within specified deadline.
- Implemented and maintained **CI/CD** pipelines using **Jenkins** for code quality and rapid deployment, increased efficiency of the team by 20%.
- Utilized **Mockito** and **Selenium** to create test cases for Java and UI components respectively to perform unit testing.
- Collaborated with clients and project management to gather requirements and participated in development of automation projects using **Python** and **Machine Learning** algorithms which cumulatively led to reduction of **10 Full-Time Equivalent**.
- Served as subject matter expert for the projects, delivering comprehensive knowledge transfer sessions to multiple teams and newly joined team members.

EDUCATION

Master of Science, Computer Science, Rochester Institute of Technology

Aug 2021 — Dec 2023

Coursework: Advance Object-Oriented Programming Concepts, Foundation of Algorithms, Introduction to Big Data, Advance Graph Database, Big Data Analytics, Neural Networks, Introduction to Computer Networks.

GPA : 3.53

Bachelor of Engineering, Electronics and Telecommunication, University of Mumbai

Aug 2014 — Jun 2018

TECHNICAL SKILLS

Languages

Java, Python, SQL, Shell Script, HTML5, CSS3, JavaScript, MongoDB, Cypher

Web Tools & Frameworks

Spring Boot, React, Angular, REST, SOAP, XML, JSON, Flask, Pandas, Apache Kafka

DevOps Tools

Git, SVN, Jenkins, Docker, GitHub Actions, Maven, Gradle, Linux, Make

Cloud Tools

AWS (Lambda, S3, DynamoDB, API Gateway)

Databases

Relational-DBMS (MySQL, Oracle), Graph Database (Neo4j), NoSQL(MongoDB)

PROJECTS

Deep Neural Networks in Java | *Java*

Jan 2023 — May 2023

- Designed and implemented Feed Forward, Recurrent and Convolutional neural networks along with backpropagation from scratch using Java.
- Added memory cells like LSTM, GRU for RNN and utilized techniques such as batch normalization and dropout for CNN.
- Achieved about 98% accuracy on datasets like MNIST, CIFAR-10 and Iris.

KPI Analyzer | *Java, Spring Boot, MySQL, React*

July 2019 — July 2020

- Worked in an agile team of 10 to develop RESTful web services and dashboards using Angular and d3.js for a business KPI's analysis tool, that reduced time taken by business heads for performance analysis by over 50%.
- Used Selenium to create UI testing infrastructure that reduced number of bugs reported by users by 15%

Enhanced Cleaning, Clustering, and Visualization for GPS Dataset | *Python*

Aug 2022 — Dec 2022

- Implemented efficient multi-threaded data cleaning techniques on a large GPS dataset, boosting the cleaning process's efficiency by more than 70%.
- Successfully applied Hierarchical Agglomerative clustering algorithms to the cleaned data, identifying and analyzing the most frequently visited locations within the dataset.
- Utilized the obtained results to create a KML file, seamlessly integrating and visualizing the data on Google Earth, enhancing data representation and accessibility.