# Vaibhay Sharma

Rochester, New York, 14623

LinkedIn: https://www.linkedin.com/in/vaibhaysharmaconnect/

Email: vs1654@g.rit.edu

CodeChef: https://www.codechef.com/users/lonesomebronco

#### **SKILLS**

Programming/Scripting Languages: (Proficient) C++, C, Java, SQL, PostGres, NOSQL,mySQL; (Familiar) Python, JavaScript, MATLAB, GIT, REACT,Neo4J Web technologies and Development: HTML5, CSS3, PHP, Software Development, Data Science, Operating Systems, AI/ML, Data Structures and Algorithms Frameworks and tools: MySQL, Wireshark, AWS, Cloudshell, EC2, Lambda Function, IC3, Cloudwatch, API Gateway, VPC, Docker, DynamoDB, Cloud

## **EXPERIENCE**

# **Teaching Assistant -> Advanced Object-Oriented Programming (using Java)**

Rochester Institute of Technology, Rochester, NY, USA

08/2023 - Present

- Guiding 50+ students in Java and OOPS concepts, resulting in a 20% increase in average assignment grades over the semester, while delivering tailored lessons and assessments to enhance understanding of Java principles.
- Provided constructive feedback on code quality, efficiency, and adherence to requirements, ensuring students' continuous improvement in Java programming skills.

#### **Graduate Assistant**

Rochester Institute of Technology, Rochester, NY, USA

08/2023 - Present

- Evaluated and analyzed data for MCAS & DDI Tutoring, achieving a 30% improvement in program effectiveness, while overseeing a team of 10+ peer tutoring leaders to increase student engagement by 25%.
- Collaborated on team-building activities, resulting in a 100% increase in participation in the Peer Course Consultant program.

## **Retail Systems Analyst**

Rochester Institute of Technology, Rochester, NY, USA

06/2023 - 08/2023

- Mentored in managing online systems for 7+ RIT Dining facilities, ensuring PCI DSS compliance, and resolving incidents.
- Managed tasks within InfoGenesis, OnDemand Ordering, and Yellow Dog Inventory of 2000+ items to streamline operations.

#### **Orientation Leader**

Rochester Institute of Technology, Rochester, NY, USA

08/2023 - 08/2023

 Coordinated over 25 students during orientation, providing adaptive leadership and fostering team success through effective communication, ensuring a smooth and impactful experience for all participants.

#### **Software Development and Research Internship**

The LNM Institute of Information Technology, Jaipur, India,

05/2020 - 07/2020

- Implemented a Linear Regression Model on the Covid dataset of Chicago with 10,000+ entries.
- Designed the relationship between the number of Covid tests and positive cases, achieving an impressive accuracy of 87%.

### **Software Development Internship**

ACPL Systems Pvt. Ltd, Gurgaon, India,

05/2019 - 07/2019

Rochester, NY

- Constructed a packet sniffer on 5 computer network protocols for "Attack Fence", reducing network security breaches by 30%.
- Led a team of 5 to research Cyber Security Compliance, resulting in recommendations that revamped system security by 25%.

## **EDUCATION**

## **Rochester Institute of Technology**

Golisano College of Computing and Information Sciences

Master of Science, Computer Science

Coursework: Artificial Intelligence, Machine Learning, Big Data Analytics, Cloud Computing, Non-relational Data analysis

December 2024 GPA: 3.7/4

#### The LNM Institute of Information Technology

Bachelor of Technology, Computer Science

Coursework: Advance OOPs, Algorithms, Computer Networks, Operating System, Databases, Distributed Systems

Jaipur, India September 2021

# PROJECTS

# Prototype Of Drowsiness Detection | (Python, OpenCV, dlib, Classification)

- Executed a real-time Drowsiness Detection prototype with optimal EAR (0.267) & MAR (0.585) thresholds.
- Revamped facial image capture in driving scenarios, achieving 89% accuracy with a pre-trained model & ROC analysis.
- Incorporated 3 alert system with visual & auditory cues for communication of drowsiness indicators to the driver.

# IMDB Data Analysis | (Python, PostgreSQL, MongoDB, Apache Spark)

- Assessed a 21M-record dataset, improving query performance by 70% with key and materialized view strategies.
- Leveraged k-means clustering and Apriori algorithm for 20% better decision-making and transitioned relational database to NoSQL, enhancing data accessibility by 30% and retrieval efficiency by 25%.

# NYC Crash Data Analysis | (Python, Pandas, Geopandas, Folium, K-means Clustering)

- Analyzed Brooklyn's traffic data from 2019-2020, identifying accident hotspots and trends using geospatial analysis and K-means clustering.
- · Created interactive Folium maps to visualize accident data, conducting detailed temporal analysis for informed decision-making.

#### Providing SaaS using Docker containers over the cloud | (AWS, Docker, Firefox)

Generated Firefox as different instances to different customers using the Dockers containers making it scalable and easily modifiable.

# NFL demo Sports website | (HTML, CSS, JavaScript)

Designed Frontend and Backend of a fully working sports website using HTML5, CSS3 and JavaScript.

## **AWARDS**

• Inaugural RIT Outstanding Graduate Student Award Nominee