

Riya Jain

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Education

New York University

M.S. in Information Systems.

Expected Graduation: May 2025

New York, NY

Relevant Coursework: Fundamentals of Algorithms, Database Systems, Devops and Agile, Data Science for Business.

Maulana Azad National Institute of Technology (NIT Bhopal)

July 2016 - June 2020

B.Tech in Computer Science and Engineering.

Bhopal, India

Work Experience

New York University, New York

Course Assistant

September 2024 - Present

- Teach Python to **90+** students a semester, lead workshop sessions, hold weekly office hours and grade exams.

Rally Sports Venture, New Jersey

Software Engineer Intern

June 2024 - August 2024

- Built a React application with 10+ reusable components (payment forms, dashboards, content galleries) and **2000+** lines of Javascript code, facilitating membership purchases and exclusive content access; the tool is now utilized by over **1000+ users**.

John Deere, India

Senior Software Engineer

September 2021 - May 2023

- Developed a React-based Attachment Recommender Tool for Deere.com utilizing AWS (Lambda, DynamoDB, API Gateway); implemented real-time inventory synchronization through DynamoDB triggers, built interactive product cards with shopping cart and dealer locator features, resulting in **35%** growth in attachment sales in **one quarter**.
- Implemented end-to-end CI/CD pipeline using GitHub Actions for frontend and backend applications, reducing deployment time by **30%** and increasing release frequency from **bi-weekly to weekly**.
- Built infrastructure using AWS CloudFormation; developed Python Lambda functions and REST APIs to fetch data from DynamoDB, enabling automated product promotion updates on deere.com and serving **30,000+** daily customer requests in the U.S region.
- Optimized cloud infrastructure costs by **25%** through strategic use of serverless technologies and auto-scaling policies, enhancing resource utilization and operational efficiency.

John Deere, India

Software Engineer

August 2020 - August 2021

- Reduced vulnerabilities on EC2 web servers by **90%** by automating the redundant AMI Upgrade process and cutting monthly maintenance time by **10 hours** in one quarter.
- Introduced DevOps methodologies through the deployment of Comprehensive Sonar and Veracode scans, monitoring critical metrics at regular intervals, leading to a **50%** decrease in high-risk security issues.
- Designed automated testing framework using Selenium WebDriver to validate John Deere's product pages, incorporating cross-browser testing and dynamic content validation through 30+ custom test scripts.

Projects

StreamSphere Streaming platform (Personal project, 30+ hours) - [Github](#)

January 2025 - Present

- Developed a full-stack video streaming platform using Node.js, Express, and Prisma with PostgreSQL backend, integrating AWS S3 for direct uploads and HLS for adaptive bitrate streaming, achieving efficient transcoding and content delivery.
- Engineered a responsive frontend interface using React with real-time data processing through Apache Kafka, supporting seamless video upload, sharing, and streaming functionalities for optimal user experience.

CITIBANK Trading Bots (Capstone Project, 4 team members, 70+ hours)

September 2024 - December 2024

- Built a sandbox environment for Citi Bank's trading competition platform where participants submit trading bots to compete.
- Developed an isolated containerized environment using Docker to validate submitted bots, achieving **99.9%** accuracy in detecting malicious code and improper configurations, and language-specific static analysis.

Customer's Ecommerce Website (Team Project, 2 team members, 60+ hours) - [Github](#)

September 2024 - December 2024

- Engineered a RESTful microservice using Flask-RESTX with 95%+ test coverage, implementing CRUD operations & test-driven development (TDD) and behavior-driven development (BDD) using Selenium and Behave for automated UI testing.
- Developed a CI/CD pipeline using GitHub Actions and Tekton on OpenShift, automating the deployment process through 6 key stages: clone, lint, test, build Docker image, deploy to Kubernetes, and run BDD tests.

Technical Skills

Programming Languages: Java, Python, JavaScript, TypeScript, C++, Shell Script

Web Technologies: HTML, CSS, ReactJS, Node.js, Next.js

Database & Query Languages: MySQL, PostgreSQL, DynamoDB, RDS, Redis, PL/SQL

DevOps & Cloud: AWS, Docker, Kubernetes, Jenkins, GitHub Actions, Drone

Testing & Quality Tools: Selenium, JUnit, PyUnit, Pylint, Sonarqube, Veracode