Riya Jain

Email | LinkedIn | Github

Education

New York University May 2025

M.S. in Information Systems.

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)

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.
- Applied UI/UX design principles, including user-centered design and responsive layouts, to create and prototype membership webpages using Figma, optimizing user engagement and conversion rates.

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 implementing EC2 instances Auto Scaling, Amazon S3 lifecycle policies and DynamoDB auto-scaling with defined target utilization metrics (80% read/write capacity).

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.
- Engineered Jenkins pipeline automation using Groovy scripts, incorporating automated test execution, security scans (Sonar/Veracode), team notifications, and end-to-end production deployment steps, achieving a 50% reduction in high-risk security issues.
- Designed an 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 full-stack video streaming platform with Node.js/Express backend and React frontend, integrating AWS S3 uploads, HLS adaptive streaming, and Apache Kafka for real-time data processing.

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 & Web: Java, Python, JavaScript, TypeScript, C++, Shell Script, HTML, CSS, ReactJS, Node.js, Next.js, REST APIs, WebSockets, GraphOL.

Databases, DevOps & Tools: MySQL, PostgreSQL, DynamoDB, Redis, AWS, Docker, Kubernetes, Jenkins, GitHub Actions, Selenium, JUnit, PyUnit, SonarQube, Veracode, Figma.