Riya Jain

Grove Street, Jersey City, NJ | [Email](#) | [LinkedIn](#) | [Github](#)

Education

New York University   **Expected Graduation: 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)   **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 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 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 & Web: Java, Python, JavaScript, TypeScript, C++, Shell Script, HTML, CSS, ReactJS, Node.js, Next.js.
Databases, DevOps & Tools: MySQL, PostgreSQL, DynamoDB, Redis, AWS, Docker, Kubernetes, Jenkins, GitHub Actions, Selenium, JUnit, PyUnit, SonarQube, Veracode.