Sathvikreddy Dudipala

Email: dsathvikreddy123@gmail.com | **Contact:** (404) 247-9741 | LinkedIn | Portfolio | Github

Education

Georgia State University   **August 2023 - May 2025**
Master's in Computer Science (Data Science and Analytics), CGPA:3.9/4.0   Atlanta, GA
Indian Institute of Technology(IIT) Indore   **August 2018 - May 2022**
Bachelors in Technology, CGPA: 3.8/4.0)   Indore, India

Technical Skills

Programming Languages	:	Java, Python, JavaScript, TypeScript, C++
Frontend Technologies	:	HTML, CSS, Bootstrap, React.js, Angular, Next.js, Tailwind CSS, Redux
Backend Technologies	:	Node.js, Express.js, Nest.js, Spring Boot, Spring Batch
Machine Learning	:	TensorFlow, PyTorch, Scikit-Learn, pySpark, OpenCV
Databases	:	PostgreSQL, MongoDB, SQL Server, Firebase
Developer Tools	:	Git/GitHub, Docker, Redis, Kafka, Terraform, Kubernetes, Jenkins, Postman, Jira, JUnit, Mockito, Jest, Vercel
Cloud Services	:	AWS Fargate, AWS Lightsail, EC2, S3, DynamoDB
IDE	:	VS Code, Eclipse, IntelliJ, Jupyter

Professional Experience

Full Stack Engineer - Graduate Research Assistant   **August 2023 - May 2025**
Georgia State University | Health Informatics Research Group   **Atlanta, GA**

- Integrated Exact Sciences portal with **Epic** web system via **OAuth 2.0** redirection, enabling secure auto-transfer of patient data and reducing data entry time for physicians by 70%.
- Led backend development of the integration, implementing secure token exchange, **RESTful** patient data retrieval, and sub-200ms delivery of prefilled data for rendering using **Java 17** and **Spring Boot**.
- Identified unrestricted access to patient and test order data and engineered **role-based access control (RBAC)** using **JWT**, eliminating unauthorized exposure and safeguarding 100+ daily sessions.
- Crafted **React** components using **Formik** and **Yup** to render and validate Epic-prefilled patient forms, minimizing manual input by 3× and improving accuracy by 40%.
- Collaborated in an **Agile** environment, using **JIRA** to manage sprint tasks and deliver Epic integration features aligned with release timelines.

Software Development Engineer   **June 2022 - July 2023**
Jio Platforms Limited   **Hyderabad, India**

- Engineered a scalable coupon generation system using **Node.js** and **Express.js**, allowing clients to personalize and generate up to 10M unique coupons per request.
- Optimized storage and retrieval for over 50M coupon records in **PostgreSQL** by applying indexing strategies, lowering average query time from 1.2s to 400ms.
- Collaborated with DevOps team to deploy **Dockerized** microservices on **AWS Fargate**, handling processing of 1M+ coupon requests on a regular basis while maintaining 99.9% uptime.
- Built **CI/CD** pipelines using **Jenkins** to automate **Docker**-based builds, **Jest**-based unit tests, and deployments on **AWS Fargate**, accelerating release cycles by 70% and boosting deployment reliability.

Software Development Engineer Intern   **January 2022 - May 2022**
Jio Platforms Limited   **Hyderabad, India**

- Developed the full-stack for Automator.AI, a No-Code NLP Automation Tool, using **React**, **Node.js**, and **Express.js**, enabling scalable and efficient test execution for UI and API testing.
- Designed and integrated parallel processing pipelines leveraging **Kafka**, lowering API and UI test execution time by 60% through concurrent test runs.
- Implemented a standalone inbound Email/SMS server using **Haraka SMTP**, reducing external dependencies by 90% and enhancing reliability of communication workflows.

Projects

CollabX: A Video Conferencing Platform   Github | Website

- Developed CollabX, a video conferencing platform with a responsive user dashboard built using **HTML**, **CSS**, **Node.js** and **MongoDB**; improved system responsiveness by 35% through **Redis** caching.
- Orchestrated a real-time chat system and collaborative whiteboard using **Socket.io**, **WebRTC**, and **HTML5 Canvas**, supporting 50+ concurrent users per session with sub-200ms message latency.

IITI_GO: EV Tracking Application   Github

- Spearheaded the development of a cross-platform EV tracking app using **Flutter**, providing 2,000+ IIT Indore students with real-time electric vehicle schedules and routes, cutting last-mile commute wait times by 60%.
- Configured and deployed real-time EV tracking using Traccar on **AWS LightSail**, triggering geofencing alerts and boosting route monitoring accuracy by 45% across 10+ campus vehicles.