SIDDARTHA GORUGANTI

+1 667-415-8734 | sgoruga@ncsu.edu | Linkedin: Siddartha-Goruganti | https://siddartha1007.github.io/Portfolio/

EDUCATION

North Carolina State University, Raleigh, NC. August 2023 -Expected **May 2025**
Master of Computer Science **GPA: 4.0/4.0**
Coursework: Software Engineering, Object-oriented development, Cloud Technologies(AWS, Kubernetes), Algorithms

Osmania University (UCEOU), Hyderabad, India. July 2018 - June 2022
Bachelor of Engineering in Computer Science **CGPA: 8.73/10**
Coursework: Data Structures & Algorithms, Database Management Systems, Operating Systems, Computer Networks

CORE COMPETENCIES

- **Programming Languages:** C++, Javascript, Java, Python, C, Ruby on Rails, Typescript.
- **Frameworks & Databases:** HTML**,** Node.js, React.js, Flutter, Angular.js, Express.js, Next.js, Spring Boot, jQuery, REST Api's, CSS, AWS Amplify, MySQL, PostgreSQL, NoSQL(MongoDB), AWS Dynamo DB, Vue.js, GraphQl, redis.
- **Tools and DevOps:** Docker, GIT, Jira, Excel, Visual Studio, Postman, CI/CD(Jenkins), Grafana.

WORK EXPERIENCE

Graduate Assistant, *North Carolina State University, Raleigh, NC, USA* November 2024 - Present
- Developed and optimized **RESTful APIs** using Node.js, enhancing scalability to support 2,000+ concurrent users and boosting data processing efficiency by 25%.
- Implemented Angular-based UI components with JavaScript and Material-UI, utilizing lazy loading, state management, and performance monitoring with **Grafana** for better performance and user experience.
- Contributed to open-source improvements, optimized **SQL** queries to accelerate data retrieval by 30%, and implemented **Git**-based version control with thorough code reviews to streamline code management.

Software Developer Engineer, *Broadridge Financial Solutions - Fintech* July 2022 - July 2023
- Developed 'DLT Repo', a Blockchain-based platform for repo transactions, using RESTful APIs and DAML, boosting transaction efficiency by 30% and saving **$2M-$4M** annually for clients.
- Contributed to the Sponsored Repos mode design, a **SaaS** platform, by developing scalable Node.js API endpoints and using **Microservices** architecture to improve settlement workflows, showcasing strong problem-solving skills.
- Built user-centric screens with **React.js**, enhancing UX for 3,000+ users, users while leveraging **Docker** for containerization, **PostgreSQL,** Azure, and Git for scalable deployments and data management.
- Integrated Message queue systems and built a dashboard, reducing manual testing by 90% and optimizing data flow.
- Operated in an **Agile** environment with a 40 member team to streamline software development life cycle processes.

Software Developer Intern, *Fosterate* February - June 2022
- Leveraged the **Angular** framework to develop a **real-time** web application with responsive design, creating an interactive dashboard that increased user engagement by 50% and highlighted trending company services.
- Designed and integrated multiple API's with help of Spring Boot in Java, optimizing application's core functionality and ensuring end-to-end efficient data handling processes, resulting in a 40% increase in data processing speed.
- Engineered an automated **CI/CD** pipeline with **Jenkins**, streamlining the build, test, and deployment workflows.
- Enhanced test coverage, conducted code reviews, and collaborated with cross-functional teams, product managers and QA engineers using **Jira** for issue tracking, reducing bugs by 70% and ensuring high-quality software delivery.

PROJECTS

Full Stack Development
- Built a full-stack web application using **Javascript** and **Node.js** to track expenses for budgeting and financial planning.
- Developed backend services in Node.js, focusing on API development, risk management by implementing secure auth.
- Tech used include HTML, CSS for frontend, Node.js for backend logic, and **MongoDB** hosted on Heroku.

Web Development
- Built a **Ruby on Rails**-based MVC web application for railway ticket booking, integrating **React** for a dynamic front-end, SQL for database management, and JavaScript with Websockets for real-time updates and interactive functionalities.
- Implemented testing using the **Spec** framework achieving 95% coverage to ensure reliability and stability of the system.
- Built key features such as user authentication, admin dashboard, and a rating system, improving user engagement.

Machine Learning Analysis
- Leveraged ML models (Linear Regression, Decision Tree, Random Forest, SVM) to predict 2024 carbon emissions using Climate Watch data (193 countries, 1990-2020) and evaluated performance using MSE, RMSE, MAE, and R-squared.
- **Linear Regression** achieved the lowest MSE (59.52), resulting in a 30% reduction in **RMSE** compared to next best.

Backend & Data Extraction
- Developed a tool to extract user-specific metrics by executing GraphQL queries and utilizing JSON for data processing.
- Executed graphql queries to gather detailed insights into user contributions to **gitlab** which include gists, issues, pull requests, repository discussions and overall repository contributions enabling detailed analysis of performance metrics.