Sravya Karanam

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EDUCATION

North Carolina State University Master of Computer Science - Raleigh, NC, USA	Aug 2023 - May 2025
Courses: Algorithms, Software Engineering, Object Oriented Design & Development, Data Science etc.	GPA: 3.9 /4.0
Teaching Assistant: TA for Operating Systems, Discrete Mathematics & Computer Systems	
Siddaganga Institute of Technology Bachelor of Engineering in Computer Science & Engineering	Aug 2017 - May 2021
Courses: Data Structures and Algorithms, Operating Systems, Computer Networks, Machine Learning	GPA: 9.76 /10
Achievements: Dean's List honoree and Gold Medalist	

WORK EXPERIENCE

Software Developer - NC State University - Raleigh, NC, USA

- Contributed to OpenPRA MonoRepo, managing 5000+ lines of code with Nx for maintaining packages and C++ engines
- Designed and optimized front-end components with **React**, TypeScript, Elastic UI, and Node.js, boosting user engagement by 15%

May 2024 - Jul 2024

Jul 2021 - Aug 2023

Jan 2021 - Jul 2021

• Upgraded the Sequence Editor feature via Node-based UIs, using AWS Lambda & API Gateway, raising code reusability by 20%

Software Engineer - Western Digital - Bangalore, Karnataka, India

- Developed 10+ bots using Python, REST APIs, and AWS to automate workflows, cutting manual work by 97%, reducing errors, and boosting throughput by 60% with IaC-managed environments
- Integrated **SQL** queries into IQBot for large-scale data extraction, boosting accuracy by 95% & reducing processing from 6h to 1m.
- Orchestrated containerized RPA workflows with Docker on AWS EKS (Kubernetes), leveraging autoscaling policies, achieving 99.9% uptime and integrating **CI/CD** pipelines to cut deployment time by 40%
- Built Python-based tools to automate task assignments, streamline cross-functional workflows, cut overhead by 10 hours/week
- Developed full-stack dashboards using Flask, React, and PostgreSQL to monitor bot performance and enable real-time insights
- Mentored 2 interns in **REST**ful API integration & microservices deployment: guided bot migrations from dev to prod environment, elevating productivity by 30% and ensuring robust performance through comprehensive CI/CD pipelines

Software Engineer Intern - Western Digital - Bangalore, Karnataka, India

- Architected and deployed 5+ scalable bots in Automation Anywhere (Control Room, Task Bots, Meta Bots, IQ Bots), seamlessly integrating Python to automate high-volume processes, reduce manual effort and boost automation throughput by 70%
- Developed SMTP-based notifications with Java and .NET frameworks, delivering automatic alerts to 100+ stakeholders
- Optimized CI/CD pipelines under Agile methodologies through Git, elevating team productivity by 30% and reducing bugs by 35%

SKILLS

Programming Languages:	JavaScript, Python, C++, Java, Go, SQL, Ruby
Databases:	Snowflake, MySQL, PostgreSQL, MongoDB, SQLite
Frameworks and Tools:	React, Node.js, Angular, Spring Boot, Redux, REST API, Tailwind CSS, PyTorch, TensorFlow, Django
Cloud & DevOps:	AWS, Docker, Git, CI/CD, Kubernetes, GCP, OAuth, Linux, Terraform
Certifications:	AWS Certified Cloud Practitioner, CCNA, AA, OCI (Oracle Cloud Infrastructure), Gen AI

PROJECTS

Expertiza: Open-source peer-review platform, GitHub

- Revamped an independent frontend in ReactJS with Redux for state management and Tailwind CSS for responsive design
- Integrated JWT authentication to verify and decode tokens and managed user sessions, reducing unauthorized access by 100%
- Incorporated AI-based predictive analytics for peer-review recommendations, improving platform insights by 20%

Django-PAY: E-Commerce WebApp

- Built e-commerce web-app employing Python, Django, SQLite & microservices architecture, ensuring secure transaction processing
- Enhanced performance and scalability through RESTful APIs, caching strategies, and automated CI/CD pipelines

URL Shortener:

- Designed REST API to shorten a given URL in Go executing Redis as cache and PostgreSQL as database in UNIX env
- Programmed UI with React to consume REST API, Redux to store previously shortened URLs, processing 300+ URLs monthly

BrainScan AI: Artificial Intelligence driven Brain Tumor Detection

• Engineered a CNN model via Python, TensorFlow, and Keras, achieving 95% accuracy in classifying brain tumors from MRI scans