SUKRUTH KESHAVARAM MOTHAKAPALLY

Dublin, CA | 603-688-4686 | sukruth0402@gmail.com | GitHub | LinkedIn | Portfolio

EDUCATION

Northeastern University - Boston, MA

Sept 2022 - Dec 2024

Master of Science in Computer Software Engineering

GPA: 3.8

Relevant Courses: Data Structures and Algorithms in Python and Java, Cloud Computing, Big Data, Parallel Computing,

Visvesvaraya Technological University - Bangalore, India

Aug 2016 - June 2020

Bachelor of Engineering in Computer Science

GPA: 3.0

Relevant Courses: Java and Python App Programming, Database Management, Object-Oriented Concepts, Data Structures

WORK EXPERIENCE (~ 2.5 years)

Graduate Teaching Assistant – Northeastern University (Python, Java, Data Structures, OOP) Jan 2023 - Dec 2024

Designed and graded assessments for 40+ students in Data Structures and Algorithms including Agile and SDLC best practices.

Software Engineer Intern – PipeIQ.ai, Palo Alto, CA (Python, AWS, SQL, React, TS, Node.js) Jan 2024 - Aug 2024

- Member of a **startup's** founding engineering team, taking **ownership** of multiple **microservices** using Python and Node.js, leveraging RESTful APIs and AWS (Lambda, DynamoDB, S3), accelerating MVP launch by a quarter.
- Developed a dynamic user interface with React, Next.js, and TypeScript, enabling cross-stack features like authentication, content delivery, and payment processing, boosting user engagement by 40%.
- Designed database schemas; built a web-scraping tool; Created **POCs** with **design architectures** for new product features.
- Engineered a multi-agent AI Copilot with custom fine-tuned LLMs to automate marketing workflows, driving revenue.
- Led migration of monolithic backend to scalable microservices architecture using Docker, Terraform, and Ansible.

Systems Engineer – Infosys (client - Intel), Bangalore, India (Python, C++, SQL, CICD) Dec 2020 - June 2022

- Developed **Intel driver** deployment solutions in C++ on Linux, leveraging **automation tools** and configuration management.
- Built automated Python testing frameworks for SSD firmware on Linux, boosting system performance by 15%.
- Conducted root cause analysis on driver performance using SQL, identifying and mitigating production issues.
- Re-engineered driver deployment process with Python and Shell scripting, reducing update time by 30% for 1M+ users.
- Optimized **CI/CD pipelines** with Jenkins and Git, improving code quality in driver deployment workflows.

Full-Stack Developer Intern - Infosys, Mysore, India (JavaScript, MERN, Agile) Feb 2020 - Mar 2020

- Collaborated on backend development using Node.js, Express.js, and MongoDB for an employee skills analysis platform.
- Developed React components and integrated JavaScript for real-time data visualization on the platform.

Software Developer Intern - Bosch, Bangalore, India (Python, Node.is, REST, AWS) July 2018 - Aug 2018

- Contributed to Python and Node. js backend services for a shipment tracking app, integrating RESTful APIs with 30+ endpoints.
- Optimized SQL/NoSQL queries, improving shipment data processing by 30%, and deployed a Dockerized app on AWS.

ACADEMIC PROJECTS

Personalized AI Job Tracker – Full-Stack App (Python, FastAPI, JS, Postgres, AWS, CI/CD, Docker, LLM)

- Developed a multi-agent AI-powered Chrome extension to automate job tracking using JavaScript and FastAPI.
- Deployed on AWS using Docker, with CI/CD automation via GitHub Actions, ensuring scalability and reliability.

Cloud Native Web App with Scalable Architecture (AWS, Python, Flask, GitHub Actions, Terraform, Packer)

- Developed and deployed Python-based **REST API** on AWS with load balancing, auto-scaling, and logging for scalability.
- Automated CI/CD via GitHub Actions, used Terraform for infrastructure as code, and integrated pytest for reliability.

Task Prioritization App with Cloud Deployment (React.js, HTML, CSS, Firebase, AWS)

- Built a React.js and Tailwind CSS productivity app, deployed on AWS EC2, reducing task delays by 30%.
- Developed a task scheduler with Interval Scheduling, Priority Queues, and Firebase, saving 20% time for 50+ users.

AI-based Stack Overflow Full-Stack App (Python, LLM, Airflow, Docker, FastAPI, CI/CD, GCP)

- Led team of 3 to build a Dockerized Python app, integrating GenAI (RAG, text generation, summarization) into Stack Overflow.
- Built a data pipeline with Airflow, deployed on GCP, using FastAPI for backend and Streamlit for UI, ensuring efficiency.

TECHNICAL SKILLS

- Programming
- Python, Java, JavaScript, TypeScript, C++
- APIs | Architectures
- RESTful APIs, GraphQL, JWT, Microservices, Serverless, MVC, System Design
- **Backend Frameworks**
- Flask, FastAPI, Django, Node.js, Express.js, Spring Boot
- **Frontend Technologies**
- React, Redux, Next.js, Angular.js, HTML, CSS, Bootstrap, SASS/SCSS
- **Databases**
- SQL (PostgreSQL, MySQL, SQL Server), NoSQL (MongoDB, Redis), Elasticsearch
- **Cloud Computing**
- AWS (EC2, S3, RDS, IAM, SQS, Lambda, ECS), GCP (CloudSQL, GCS, Pub/Sub)
- Git, GitHub, GitHub Actions, Jenkins, Docker, Terraform, packer, Kubernetes Devops | CI/CD