Sudhamsh Rama

Dallas, Texas (Authorized to work in USA and open to relocation)

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PROFESSIONAL SUMMARY

Innovative and certified graduate with a strong foundation in AI, Software Engineering, and DevOps principles. Holds foundational certifications from Microsoft and AWS, demonstrating expertise in cloud infrastructure, automation, and scalable system design. Eager to contribute to a forward-thinking team by leveraging skills in cloud infrastructure automation, CI/CD pipeline development, and the deployment of intelligent systems.

TECHNICAL SKILLS

Cloud Platforms	AWS, Azure, GCP
Operating Systems	Ubuntu Linux, Red Hat, Android, Windows, Mac OS
DevOps & CI/CD	Azure DevOps, GitHub Actions, Jenkins, Terraform, CloudFormation, Ansible, Docker, Kubernetes, Helm
Scripting & Programming	Python, Bash, Shell, SQL, HTML, CSS, JavaScript, React, Java, C++
Software Engineering	REST API Development, Data Structures & Algorithms, Testing (PyTest, JUnit).
Configuration	Networking (DNS, Load Balancing, Firewalls), Nginx, Apache
Databases	PostgreSQL, MySQL, MongoDB, Oracle DB
Monitoring & Logging	Prometheus, Grafana, ELK Stack (Elasticsearch, Logstash, Kibana), Splunk
Version Control	Git, GitHub, GitLab
Security & Compliance	Server Hardening, IAM, Secrets Management (Vault, KMS), RBAC
AI/ML Frameworks	Scikit-learn, TensorFlow, NLP, PyTorch, OpenCV, Pandas, NumPy, CNN, RNN
Methodologies	Agile, Scrum, DevSecOps, SDLC

PROFESSIONAL EXPERIENCE

Associate DevOps Engineer - Summer Intern | Approct, Delaware, USA   May 2024 – August 2024

- Automated **CI/CD** pipelines in **Azure DevOps** and **GitHub Actions**, reducing deployment time by 30% and enhancing software delivery efficiency.
- Assisted in building and managing **cloud infrastructure** with Infrastructure as Code (IaC) tools such as **Terraform** and **CloudFormation**.
- Monitored application performance and **troubleshoot** build/deployment issues, contributing to **incident response** and system stability.
- Collaborated with development and operations teams to integrate code into production environments, fostering **cross-functional communication**.
- Supported the deployment and management of **containerized applications** utilizing **Docker** and **Kubernetes** for improved scalability.
- Implemented monitoring and alerting solutions with **Prometheus** and **Grafana** to proactively identify issues and ensure application reliability.

- Contributed to the creation and maintenance of **technical documentation** and best practices for DevOps processes, enhancing knowledge transfer.

Linux Administrator | Meltag Marketing Pvt Ltd, Hyderabad, India   February 2023 – December 2023

- Managed and optimized **Ubuntu Linux** servers on **AWS** EC2, ensuring high availability and performance for **Python** applications and **PostgreSQL** databases.
- Implemented and maintained robust **security** protocols, including **server hardening** and **firewall** configurations, to safeguard sensitive CRM data.
- Proactively monitored system **performance** and troubleshot critical issues by analyzing **logs**, ensuring 99.9% platform stability and rapid **incident response.**
- Automated routine administrative tasks and health checks using **Python** and **Bash scripting**, saving approximately 5 hours per week and significantly enhancing operational **efficiency** in a lean team environment.
- Developed and **executed** comprehensive **backup** and **disaster recovery** plans for **PostgreSQL** databases and **AWS** infrastructure, ensuring data integrity and business continuity.
- Collaborated with development teams to streamline application deployments and integrate **DevOps** principles, fostering efficient **cross-functional communication**.

ACADEMIC PROJECTS

Library Management Hub | UT Arlington   Sep 2024

- Created an interactive web application using **Python Flask**, **HTML/CSS**, and **MySQL** with secure authentication and data validation.
- Designed modular **REST APIs** to optimize frontend-backend communication and data operations.
- Implemented **role-based access control (RBAC)** to enforce authorization and improve system security.
- Ensured security best practices across backend code and database handling.
- Deployed the web application to a live server, managing the **MySQL database** and ensuring secure access.

Smart Container: AI-Driven Inventory Monitor | UT Arlington   Apr 2024

- Designed a real-time inventory tracking system using **IoT sensors**, **mobile app**, and **cloud backend** to monitor dry goods with 98% precision.
- Developed a native Android/iOS app interface using **Figma** wireframes, implementing features like low-stock alerts, label management, and real-time inventory views.
- Engineered a secure **API gateway** and **cloud backend** to handle real-time data transfer from **IoT sensors**, ensuring <1 second latency and robust system reliability.
- Followed **Agile methodology** with iterative testing cycles (unit, integration, UAT) and emphasized system reliability and maintainability.

Artificial Intelligence Recommendation Engine | JNTUH   Jan 2023

- Built an AI recommendation system that suggests learning resources based on user preferences and past interactions.
- Used **Scikit-learn**, **TensorFlow**, and **PostgreSQL** to process data and deliver personalized suggestions.
- Applied vector database techniques to improve search accuracy and match user needs.
- Developed and managed the **REST API** to seamlessly connect the **PostgreSQL** backend to the frontend, demonstrating proficiency in system design and integration

Fire/Smoke Detection for Regular Safety System | JNTUH   **Feb 2022**

- Developed an advanced, deep learning-based system **[ResNet-50 and Bi-FPN]** for real-time fire and smoke detection, designed to enhance safety in both residential and industrial settings.
- Engineered with core computer vision techniques **[OpenCV and TensorFlow]** to achieve high accuracy and enable instant threat identification.
- Optimized model performance using advanced functions **[Intersection over Union (IoU) and cross-entropy]** for precise object localization and superior accuracy.
- Designed the system to be a robust and reliable component for modern smart safety deployments.

CERTIFICATIONS AND EXAMS

AWS Certified Cloud Practitioner | (Link to Certificate)   **AWS**

Microsoft Azure Administrator (AZ-104) | (Link to Certificate)   **Microsoft**

Designing and Implementing Microsoft DevOps Solutions (AZ-400) | (Link to Certificate)   **Microsoft**

EDUCATION

University of Texas at Arlington

Master of Science in Computer Science (January 2024-Present)   **GPA: 3.6**

- Specialization in **Artificial Intelligence** and **Software Engineering**

Jawaharlal Nehru Technological University, Hyderabad, India

Bachelor of Technology in Computer Science (May 2019-June 2023)   **GPA: 3.1**