Jithendra Kantharaju

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Education

University of South Florida, Tampa January 2025 – Present
Master of Science in Computer Engineering
Relevant Coursework: *Fair ML, IOT Security, Agile Project Management, Computer Architecture.*

Technical Skills

Programming Languages: C, OOPS C++, Python, Embedded c, MYSql basics, Bash.
Infrastructure & Configuration Languages: YAML, HCL.
Developer Tools & Platforms : Linux & CLI, Vagrant, Git & GitHub, GitHub Actions, Maven, Jenkins, Nexus, SonarQube, Ansible, Docker & Docker Compose, Kubernetes, Terraform.
Libraries & Framework Integrations: Ansible modules, Jenkins Pipeline DSL, Python stdlib.

Work Experience

Trainee Software Engineer August 2023 – December 2024
Corezeal Technologies *Bangaluru, India*

- Managed Linux-based server environments using tools like Vagrant and bash scripting, automating daily administrative tasks and ensuring optimal system performance.
- Built and deployed cloud infrastructure on AWS, utilizing services such as EC2, S3, RDS, ELB, IAM, CloudWatch, and Auto Scaling for high availability and scalability.
- Implemented CI/CD pipelines using Jenkins, Maven, Nexus, and SonarQube, enabling automated testing, building, deployment, and notifications through Slack integration.
- Developed and managed infrastructure as code using Ansible and Terraform, automating provisioning and configuration of cloud resources and application environments.
- Containerized applications using Docker and orchestrated deployments with Kubernetes, managing multi-container setups, services, scaling, and secrets management in production environments.
- Adopted GitOps practices with AWS CodePipeline, GitHub Actions, and Terraform, streamlining cloud-native continuous delivery and version-controlled infrastructure deployments.

Intern September 2021 – October 2021
Agimus Technologies Pvt Ltd. *Bangaluru, India*

- Designed an ESP32-based IoT device to remotely measure COVID-19 patients' vital signs (non-contact body temperature via MLX90614 and pulse/O_2 via MAX30102), enabling real-time monitoring without direct patient contact.
- Programmed firmware on the ESP32 to acquire sensor data and connect via Wi-Fi, logging timestamped temperature and pulse readings to Google Sheets for secure cloud storage and remote access.
- Implemented cloud integration and alerts by using Google Apps Script (and Twilio SMS) to notify doctors when patients' vital readings exceeded safe thresholds.
- Contributed to hardware design, including an easy-to-clean enclosure with clear sensor placement markings, ensuring ease of use and rapid deployment in isolation/quarantine settings.

Projects

Movie Streaming Application

- Designed and deployed a scalable full-stack movie streaming platform using a containerized microservices architecture.
- Implemented CI/CD pipelines with Jenkins to automate testing, Docker image builds, and Kubernetes deployments on AWS EKS.
- Configured AWS S3 for secure media storage with public access policies and dynamic bucket management.
- Utilized Nginx to serve static frontend content and Node.js for backend API services.
- Managed infrastructure using AWS EC2 for Jenkins agents and RDS for persistent MySQL storage.
- Technologies used: **Docker**, and **Kubernetes (EKS)**, **Jenkins**, **AWS (S3, EC2, RDS)**, **Node.js**, **MySQL**.

Order Management System (OMS)

- Managed all sales of client products and issued licenses based on hardware information.
- Handled contracts between the company and third-party entities.
- Generated detailed sales reports, including sales by salesperson and year.
- Coding and unit testing to ensure system functionality and accuracy.
- Technologies used: **HTML/CSS**, and **Git**, **Jira**, **PyTest**.

CI/CD Pipeline for React App on AWS

- Architected and implemented a complete CI/CD pipeline on AWS to automate the build, and deployment of a React.js application.
- Utilized AWS CodePipeline to automatically trigger the pipeline upon code commits to a GitHub repository.
- Configured AWS CodeBuild with a buildspec.yml file to automate dependency installation and application build commands.
- Deployed the built application to an Amazon S3 bucket, configuring it for static website hosting with public access.