# Sai Kaushik Manchala

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# Summary

Software Engineer with expertise in Cloud Infrastructure DevOps Engineer with AWS, Azure, Kubernetes, and Terraform. Architected scalable, secure platforms for enterprise applications and real-time analytics. Passionate about automation, distributed systems, and AI.

## TECHNICAL SKILLS

Cloud Platforms: Microsoft Azure, AWS

Programming Languages: Python, Go, Bash, PowerShell, SQL, Java, C++, YAML, JSON

Infrastructure DevOps Tools: Terraform, Kubernetes, Helm, Docker, ArgoCD, GitHub Actions, Azure DevOps, Jenkins

Monitoring Observability: Splunk, Datadog, AppDynamics, Prometheus, Grafana, ELK Stack, Azure Monitor

Database Storage: MySQL, PostgreSQL, Azure SQL, MongoDB, Azure Files, NFS

AI Automation: Python-based automation, AI integration, REST APIs, Event-driven architecture

Version Control Collaboration: Git, GitHub, GitLab, JIRA, Confluence

Operating Systems: Linux (Ubuntu, CentOS), Windows Server

Interpersonal: Technical Documentation, Mentorship, Team Collaboration, Agile Methodologies

# Experience

#### Software Engineer - Infrastructure

May 2025 - Present

Mastronardi Produce Limited

Remote

- Designed reusable Terraform modules and automated Azure infrastructure provisioning for 6+ enterprise applications (Grower Supply Portal GSP 2.0, NAV 2018, MPL Vision and MPL Floor), ensuring consistency and reducing provisioning time by 40%.
- Automated deployments of APIMs, Function Apps, AKS clusters, and Azure SQL using Azure DevOps reduced release cycles by 35%.
- Provisioned Delinia & CrowdStrike and architected Azure Front Door, Fortigate Firewall, and WAF, reducing exposure by 40%.
- Implemented proactive monitoring with Azure Metric Insights and Application Insights, reducing MTTR by 60%.
- Supported the cloud infrastructure team powering enterprise-scale operations across North America greenhouses and supply chains.

## Software Engineer – DevOps

Charter Communications

May 2024 - Apr 2025

St.Louis, MO

- Executed zero-downtime migration of high-volume transactional databases to Amazon RDS using Terraform and Multi-AZ architecture—automated schema deployments to safeguard \$30M/day in business operations.
- Containerized and deployed 20+ Java Spring Boot microservices using Docker and Helm charts on Kubernetes CaaS clusters—enhanced scalability, simplified rollbacks, and ensured consistent runtime environments across dev, staging, and production.
- Engineered robust CI/CD pipelines in GitLab and Bitbucket for 20+ services—automated build, test, and deployment workflows with environment-specific configurations, cutting release cycles by 40% and increasing deployment success rates by 50%.
- Administered Kafka clusters and NiFi flows processing tens of millions of daily events—implemented real-time monitoring and alerting with Splunk, AppDynamics, and Datadog, reducing incident response times by 60% and improving system reliability.

## Software Engineer

Aug 2023 - May 2024

Pristen IT Systems

Austin, TX

- Designed and implemented Python modules for Verastel-Spark, a compliance monitoring platform, focusing on event-driven architecture and data processing pipelines.
- Built and documented RESTful APIs with authentication/authorization controls to support integration with external services
- Developed scalable microservices and data ingestion workflows for TechUnicorn as a Python/Go developer for CORA and AMS applications.
- Automated deployment workflows using Kubernetes manifests and Helm charts, standardizing service rollout across environments.
- Deployed monitoring stacks (Prometheus + Grafana) and integrated alerting rules for system availability and latency SLAs.

## Software Developer

Qualcomm India

May 2019 - July 2021

Hyderabad, India

- Implemented and optimized C++ modules for Bluetooth and Wi-Fi firmware, for connectivity reliability and ensuring compliance with IEEE standards.
- Automated nightly build validation and regression testing using Python and Bash, cutting manual QA effort by 30%
- Integrated Jenkins pipelines for continuous builds, regression testing, and release packaging, accelerating integration cycles
- Debugged kernel-level crashes and memory leaks using GDB, performance profilers, and custom log parsers, reducing turnaround time on critical bugs.
- Developed lightweight internal tools to parse and visualize performance logs, improving issue triage for senior engineers and QA teams.

# **Projects**

## ContextBridge - AI-Aware Task & Note Sync | Python, MCP, REST APIs

- Developed a cross-platform productivity tool leveraging semantic context and MCP integration for intelligent task syncing and scheduling.
- Job Notification Bot | Python, Telegram API, Web Scraping
  - Created a Telegram bot in Python for delivering real-time job alerts using web scraping, keyword matching, and resume-driven filtering.

#### Streak Widget | SwiftUI, iOS

• Designed a minimalist habit-tracking widget in SwiftUI with streak visualization, smart reminders, goal customization, and adaptive UI

## FireFly Clone | React, CSS, Figma

• Built a full-featured clone of the FireFly app using React and CSS, replicating its UI with pixel-perfect accuracy and responsive design.

# **EDUCATION**

## Gannon University

 $Aug\ 2021-May\ 2023$ 

Master of Science in Software Engineering

GPA: 3.5/4.0

Coursework: Real-Time Operating Systems, Software System Design and Implementation, Microcontroller Programming, Data Structures and Algorithms, Hardware-Software Integration, Cloud Infrastructure Automation, DevOps and CI/CD Pipelines, Distributed Systems, AI Integration, Embedded Systems Design,

## Certifications

- Microsoft Certified: Azure Fundamentals (AZ-900), Azure AI Fundamentals (AI-900)
- AWS Certified DevOps Engineer