# **RESUME**

# Siddhartha Achari Sharabu

Opposite Govt Hospital, Noonepalli, Nandyal – 518501, India ↓ +91 7780283590 | ☑ sid.edu.1729@gmail.com ☐ Portfolio | GitHub | LinkedIn | SourceForge

## **PROFESSIONAL SUMMARY:**

Cloud & Systems Engineer with 3 years of experience in infrastructure automation, cloud-native deployments, and scalable system design. Strong knowledge of AI/ML concepts, Generative AI (OpenAI, Google Gemini), and agentic AI frameworks, gained through extensive personal projects and academic work. Skilled in Python, React JS, and modern AI/ML frameworks with a proven ability to build prototypes, integrate AI services into applications, and optimize deployments on GCP and Kubernetes. Currently pursuing an M.Tech in AI & Machine Learning to deepen expertise in LLMs, multi-agent orchestration, and intelligent automation. Adept at translating complex technical concepts for business stakeholders and collaborating in cross-functional teams to deliver high-quality solutions.

## **TECHNICAL SKILLS:**

- Programming & Frameworks: Python, React. js, C, Bash, React, OpenCV, TensorFlow, Keras
- Generative AI & LLMs: OpenAI API, Google Gemini, Prompt Engineering, LangChain, Multi-Agent Systems
- Cloud & DevOps: GCP (ACE & PCNE certified), Kubernetes (GKE), Docker, Terraform, Puppet, CI/CD (GitLab, Azure DevOps)
- Embedded & IoT: Raspberry Pi, Arduino, BeagleBone, Embedded Linux
- Specialties: System Design, Scalability, Security, AI-driven Automation

## **INDIVIDUAL PROJECTS:**

## Fortress Vault – Web-based Secure Storage Application

- Developed a **Next.js** web application integrated with **Firebase** for authentication and Firestore database storage.
- Implemented **role-based access control (RBAC)** for secure file and credential management.
- Designed a **responsive UI** with Material UI components for seamless multi-device use.

## **Multi-Agent AI Voice Assistant**

- Built a **LangChain-based** assistant integrating **Google Gemini** for multilingual conversational capabilities.
- Added hotword detection, real-time audio streaming, and vector database (FAISS) retrieval for contextual answers.

## **Real-Time Recognition & Interaction System**

- Developed a **Python** + **OpenCV** system on Raspberry Pi for facial detection and voice command-based hardware control.
- Integrated speech recognition and TTS for natural interaction.

#### **Custom Embedded Linux OS (The Deck Linux)**

• Created a lightweight, AI-optimized Linux distribution for **BeagleBone AI** during internship with BeagleBoard.org.

## **Handwritten Digit Recognition**

• Designed and trained a **CNN** with **TensorFlow/Keras**, achieving **99.5% accuracy** on the MNIST dataset.

## **PROFESSIONAL EXPERIENCE:**

## **Systems Engineer – Cloud & Automation**

Tata Consultancy Services | Oct 2022 – Present

- Designed and deployed cloud-native applications on GCP and Kubernetes, ensuring scalability, security, and high availability.
- Automated infrastructure provisioning and configuration using Terraform and Puppet, reducing setup times by 40%.
- Developed and maintained CI/CD pipelines to streamline software build, testing, and deployment cycles.
- Provided L2 GCP cloud infrastructure support, troubleshooting compute, storage, and networking issues for global enterprise clients.
- Collaborated with project managers, business analysts, and engineers to ensure technical milestones were met
- Participated in architecture reviews to recommend performance optimizations and cost-efficient cloud strategies.
- Documented workflows and created knowledge base articles for operational excellence and team onboarding.

# **CERTIFICATIONS:**

- Associate Cloud Engineer (GCP-ACE)
- Professional Cloud Network Engineer (GCP-PCNE)

# **ACADEMICS:**

## BITS Pilani, Hyderabad, India

Master of Technology (M.Tech) in AI & Machine Learning (Work Integrated Learning Programme) 2024 – Present

# **SVR Engineering College**

Bachelor of Technology (B.Tech) in Electrical and Electronics Engineering

# **ESC Govt Polytechnic College**

Diploma in Electrical and Electronics Engineering