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[siva-subramanyam-gh.github.io/my-portfolio](https://siva-subramanyam-gh.github.io/my-portfolio)

## EDUCATION

**VIT-AP University** | Amaravati, India *Bachelor of Technology in Computer Science (Specialization in AI/ML)*

*Expected Graduation: 2027*

- **CGPA:** 9.0 / 10.0
- **Key Coursework:** Data Structures & Algorithms, Operating Systems, Machine Learning, Embedded Systems, Object-Oriented Programming (Java/Python).

## TECHNICAL SKILLS

- **Languages:** Python (Advanced), Java, C++, Kotlin, SQL, Shell Scripting.
- **Core Domains:** On-Device AI, Android System Engineering (AOSP/Rooting), Mobile Optimization.
- **Tools & Frameworks:** PyTorch, ADB (Android Debug Bridge), Git, Docker, KernelSU, Scrcpy.
- **Web Technologies:** HTML5, CSS3, Tailwind CSS, JS
- **Languages Spoken:** English (Professional), Telugu, Hindi, Mandarin Chinese (Basic/HSK Learner).

## PROJECTS

**The Neural Governor** | *Python, PyTorch, KernelSU Designed an intelligent, on-device thermal management system for high-performance Android devices.*

- Developed a Python-based neural network to predict battery temperature 5 minutes into the future based on real-time usage patterns.
- Implemented a novel CPU frequency locking mechanism using chmod and system-level overrides to prevent the Android OS from aggressively boosting the CPU, preventing overheating.
- Successfully deployed on a Snapdragon 8s Gen 3 device (Poco F6), maintaining sustained performance stably under load.

**Hyper-Connect** | *Python, ADB, Scrcpy Built a custom bridge between Desktop and Android environments to streamline device control.*

- Automated complex ADB (Android Debug Bridge) commands to allow seamless mirroring and file transfer between a laptop and a mobile device.
- Created a unified interface for developers to monitor device stats and control screen interactions remotely, reducing testing friction.

**FlavourFlow App** | *Kotlin, Android SDK, AI Integration* Developed a full-stack Android application blending utility with AI creativity.

- Integrated generative AI APIs to analyze user inventory lists and suggest culinary recipes.
- Implemented a clean, inventory-based task management system to reduce food waste and assist in meal planning.

**Custom Android OS Build** | *AOSP, C++, Linux Kernel*

- Compiled and optimized a custom Android ROM for personal devices.
- Modified kernel parameters to optimize the scheduler for a specific balance of battery life and burst performance.

## **CERTIFICATIONS**

- **Building RAG Agents with LLMs** – NVIDIA
- **Full Stack Development (Static & Responsive Web, Databases)** – NxtWave

## **ACHIEVEMENTS & INTERESTS**

- Active problem solver on LeetCode (Data Structures & Algorithms in Python).
- Enthusiast in customizing Android Kernels and "Root" modifications for performance tuning.
- Currently self-learning Mandarin Chinese with a goal of HSK proficiency.