Gagan Malvi

Platform Engineer, Systems Architect

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Vellore, Tamil Nadu

A capable developer working on Android platform and Linux internals. Works with Qualcomm and MediaTek chipsets, and their BSPs, with over 4 years of collective experience. Familiar with system administration and programming, and a recognized developer at XDA-Developers.

Languages

English	-	Fluent
Hindi	-	Intermediate

Skills

- C++
- C
- Python
- Linux
- Debugging
- Mobile Devices
- Graphic Design
- Gerrit
- Operating Systems
- AOSP
- Git

Education

B.Tech in Information Technology
VIT, Vellore 2020 - 2024
Current CGPA: 8.41

XII (Senior Secondary), CBSE
Sri Chaitanya, Bengaluru 2020
Percentage: 91.4%

X (Secondary), CBSE
Kendriya Vidyalaya NAL, Bengaluru 2018
Percentage: 91.0%

Experience

Teracube Inc - Platform Engineer
Feb, 2021 - present

- Spearheading Teracube Open Devices - getting all our devices to work on AOSP with open source trees. Working on platforms MT6765 and MT6771.
- Working on the Android 12 platform update for the Teracube One; feature parity, and performance improvements
- Working on MediaTek BSPs (10, 11, 12) to provide software updates for Teracube smartphones, and working on aftermarket operating systems for the same, including certification testing for GMS.

Paranoid Android - Systems Engineer
July 2020 - present

- Brought up and maintained the following Android devices on AOSPA/CodeLinaro/CodeAurora codebases, worked on improving performance and overall user experience on these platforms, with help from the team.

FloMobility - Platform Engineer
January 2023 - present

- Helped set up and coordinate the development of the operating system platform for FloEdge, an outdoor grade powerful edge computer that is ready to deploy for any robotics and AI applications

ACM-VIT - Technical Director
March 2022 - present

- Helped set up and coordinate recruitment of freshers.
- Managing and guiding all technical departments and advising the Board on infrastructure and related technical aspects required for the function and stability of the chapter.

Projects

The Styx Project https://github.com/StyxProject *August 2020*

- A lightweight AOSP-based aftermarket distribution aiming to provide speed, stability, enhanced battery, reduced bloat and the subtly-enhanced beauty of stock Android to users.
- Features many improvements to AOSP to improve performance, and overall user experience
- Supported by over 30 devices across 5 OEMs
- Many improvements over AOSP to improve privacy and security
- Supported Android versions: Android 11, 12

Paranoid Android https://github.com/AOSPA *November 2021*

- Worked on supporting the POCO X2 (SM6150 platform) on LA codebase for Android 13
- Worked on platform and device side semantics and performance improvements to improve overall user experience
- Helped out with development for other SM6150 devices like the Redmi Note 10 Pro (sweet)

Cobra https://github.com/gaganmalvi/cobra-cli *February 2023*

- A PoC of an intrusion prevention system making use of KVM, libvirt, and QEMU.
- Calculates performance metrics and determines if the system is under attack, and blocks the attack accordingly
- Part of a university course project

Arcadia Linux https://github.com/arcadialinux *March 2021*

- A Linux-based distro aiming for speed, performance and a great overall experience on portable devices and workstations.
- Based on Arch Linux, purely made to learn about Linux internals and to create a distro that would be perfect for the end user

Other projects https://github.com/gaganmalvi

Certifications

LFD103: A Beginner's Guide to Linux Kernel Development (The Linux Foundation) *Issued Sep 2021*

Show credential