

AMNEESH SINGH

Email : amneeshsingh at proton dot me - me at amneesh dot com - natto at weirdnatto dot in
Homepage : weirdnatto.in - amneesh.com
GitHub : natto1784

WORK EXPERIENCE

Texas Instruments, Bengaluru

Embedded Software Engineer

Aug 2025 - Present

- Working with Sitara RTOS team
- Working on SDHC driver for ZephyrOS

Embedded Software Engineer Intern

Feb 2025 - July 2025

- Added AM64x/AM243x Cortex-R and Cortex-M support for ZephyrOS
- Wrote ADC, SPI, EPWM, ECAP and NOR Flash device drivers for ZephyrOS

Embedded Software Engineer Intern

July 2024 - Sept 2024

- Tested various Xen features on K3 with Linux and ZephyrOS
- Wrote Yocto recipes for enabling Xen on K3
- Enabled Xen on baremetal and freertos binaries
- Wrote sample inter-VM communication programs using shared memory and event channels

Cypherock, Gurugram (Hybrid)

Software Engineer Intern

June 2023 - Sept 2023

- Worked on the firmware apps in C
- Worked on the Electron side of things in Typescript
- **Implemented** the sockets based PoC for an MPC based threshold signing scheme

TurboML, Remote

Software Engineer Intern

November 2023

- Worked on the deployment side of things involving docker and nomad

STUDENT PROGRAMS, SCHOLARSHIPS, EXAMINATIONS

- **Google Summer of Code 2022** | C - GLib - Git

I participated as a contributor in **Google Summer of Code 2022** at libvirt and got paid a stipend for it by Google. The project involved adding the new introspectable statistics provided by QEMU and adding them under the libvirt statistics API.

- NOC: Foundations of Cryptography, IIIT Bangalore, NPTEL *May 2022*
- NOC: Computer Architecture, IIT Delhi, NPTEL - *May 2022*

EDUCATION

B.Tech, Information Technology

Maharaja Agrasen Institute of Technology

(2021 - 2025), 8.6GPA

SKILLS

Programming Languages

- **Proficient:** C/C++, Rust, Python, Javascript
- **Experienced:** Lisp, Haskell, PHP, Java, Lua, Go, x86-Assembly, ARM-Assembly

Tools

- **General:** GNU/Linux, Nix/NixOS, Xen, POSIX shells, TeX, Git, ffmpeg
- **DevOps:** Docker, Nomad, Consul, Vault, Terraform, ConcourseCI, GitHub Actions, nginx, OCI
- **Embedded:** ZephyrOS, Yocto, Baremetal, FreeRTOS, Device Driver Development

Soft Skills

- **Languages:** Hindi, Punjabi, English
- **Hobbies:** Home server/lab, Writing, Philosophy