

PROJECTS

◇ Mitmproxy

I have made [several contributions](#) to [mitmproxy](#), an interactive TLS-capable intercepting HTTP proxy. Notable contributions:

- Fixed a bug that would tremendously slow down download speeds for HTTP/2 connections, yielding a 10x increase for most cases. [\[#7317\]](#)

◇ Skylon

[Skylon](#) is a web browser rendering engine written entirely from scratch which implements an HTML parser, a CSS parser and a rendering pipeline.

◇ ACT Fibernet

Rewarded 10k INR for reporting a severe flaw in the implementation of the ISP's intranet firewall rules. [Read report](#)

◇ Delhi Police – Cybersecurity Hackathon

Secured first position and a reward of 12k INR for developing a filter that actively prevents any client device from accessing potentially malicious URLs. For proxying traffic, the wireguard mode in mitmproxy was used and filtering logic is injected via a mitmproxy addon. [Source Code](#)

◇ 3D Printer

Won second prize in a science fair for building a 3D printer. Currently migrating this printer to a core-xy motion system for which I'm designing the parts from scratch for fun. [Source Repository](#).

◇ Home Server

My sibling and I maintain several home servers: a firewall, two virtualization nodes running proxmox which serve various purposes including network storage, media management, 3D printer firmware and more, and a Raspberry Pi running KVM over IP for remote management. [Related Repositories](#).

SKILLS

◇ **Languages:** Proficient in Python. Familiar with L^AT_EX, HTML/CSS, JavaScript, Bash.

◇ **Others:** Git, Docker, Linux Administration.

EDUCATION

◇ **University School of Automation & Robotics** *2023 – 2027*
Bachelor of Technology in Industrial Internet of Things.

◇ **St. Xavier's School, Rohini** *2010 – 2022*
Central Board of Secondary Education.