

Manan

Portfolio | manan19340@gmail.com | LinkedIn | GitHub

PROFILE

Computer Engineering student at Thapar Institute of Engineering and Technology with hands-on experience building full-stack applications and desktop utilities. Passionate about low-level programming, backend systems, and performance-focused software. Works primarily on a Linux-based development environment.

EDUCATION

Thapar Institute of Engineering & Technology <i>Bachelor of Engineering in Computer Engineering</i>	2025 – 2029 Punjab, India
Moti Ram Senior Secondary Model School <i>Senior Secondary School Certificate (10+2)</i>	2022 – 2024 Chandigarh, India

PROJECTS

WinKey | *Electron.js, Node.js, otplib*

- Built a cross-platform desktop 2FA authenticator implementing RFC 6238 compliant TOTP generation via otplib, enabling secure time-based authentication on desktop platforms.
- Integrated Google Drive for one-click backup and restore of authentication secrets, with a local fallback system to prevent data loss during overwrites.
- Packaged the app with Electron Builder for simple installation, with planned enhancements including AES secret encryption and bcrypt-based local password protection.

UniLost | *Next.js, Supabase, React*

- Built a unified student campus dashboard integrating timetable management, mess scheduling, and a lost-and-found tracker into a single modular platform.
- Leveraged Supabase for real-time database sync and authentication, with role-based access control enabling secure multi-user access across the platform.
- Designed a component-driven architecture using reusable React modules, making it straightforward to extend the platform with additional campus utilities.

StreamDecky | *Next.js, Node.js, Express.js*

- Developed a browser-based Stream Deck alternative that renders a configurable button grid from a `settings.json` file, eliminating the need for proprietary hardware.
- Built an Express backend to handle server-side command execution, enabling secure launching of applications and custom URI schemes from any networked device.
- Designed a fully responsive interface accessible from any browser on the local network, allowing remote control of the host PC with zero client-side installation.

TECHNICAL SKILLS

Languages: C, C++, JavaScript, Python, Bash

Frontend: React, Next.js, Svelte, HTML, CSS, Tailwind CSS

Backend: Node.js, Express.js, Flask, REST APIs, WebSockets

Desktop Development: Electron.js, Tauri

Databases: PostgreSQL, Supabase

Tools & Platforms: Linux (Arch), Git, GitHub, Docker, Figma

Core Concepts: Data Structures & Algorithms, Object-Oriented Programming, Problem Solving

Creative Tools: Adobe Photoshop, Premiere Pro, After Effects

ACHIEVEMENTS

3rd Place | *OWASP XPLO(IT)² CTF* | Thapar Institute of Engineering & Technology

3rd Place | *ACM CodeSprint'26* | Thapar Institute of Engineering & Technology

Round 2 Selection | *Samsung PRISM Program* | Samsung Research

CERTIFICATIONS

Google Cybersecurity Professional Certificate | *Coursera*

CS50x: Introduction to Computer Science | *Harvard University (edX)*

Microsoft & LinkedIn Career Essentials | *Cybersecurity, System Administration, Software Development*

Docker Foundations Professional Certificate | *LinkedIn Learning*

GitHub Career Essentials | *LinkedIn Learning*