

# Niranjhan SU

✉ niranjhansu@gmail.com    🌐 niranjhansu.vercel.app    in niranjhan-su    📱 Niranjhan    ⚡ Niranjhan LC

## Education

**Shiv Nadar University Chennai**

*B.Tech in Computer Science with a Specialization in Cyber Security*

Aug 2023 - Present

GPA: 8.5/10

## Technical Skills

**Programming Languages:** Python, C++, C, Java, Python, TypeScript

**Frameworks:** Flask, Django, PyQt, Swing/AWT, Express.js, Next.js, React

**Tools:** Git, PostgreSQL, MongoDB, MySQL, Android Studio, GDB, Valgrind

## Projects

### Clox and Jlox - Lox Language Interpreters [🔗](#)

- Developed Lox language interpreters where lexers, parsers, compilers and the VM is made from scratch.
- Implemented advanced language concepts such as OOPS, visitor pattern, lexical scoping, and recursion. Also conducted low-level profiling and optimization to improve interpreter performance and efficiency
- **Technologies Used:** Java, Make, C

### Wombra - Webnovel Viewer for Web, Desktop, and Mobile [🔗](#)

- Developed applications for multiple platforms to scrape, store, and read Web novels offline.
- Implemented efficient content extraction and parsing algorithms using BeautifulSoup. Designed a responsive user interface optimized for long-form and long-term reading on mobile devices, desktops, and browser.
- **Technologies Used:** Android Studio, Kotlin, Flask, PyQt, BeautifulSoup

### ScheduleMaker - Timetable Maker Backend [🔗](#)

- Built the backend for this College Project to generate class timetables, using Next.js API routes for handling REST API requests servicing React Based Front End.
- It automates timetable generation, while handling includes lab and faculty slot preference-based allocation.
- **Technologies Used:** TypeScript, Next.js, Node.js

### Fou - Terminal Text Editor [🔗](#)

- Designed and built a minimalistic Vim-like terminal text editor using a piece table data structure for efficient text manipulation, undo/redo operations and efficient cursor navigation.
- Implemented real-time UI updates, and optimized memory allocations for smooth performance.
- **Technologies Used:** C, Make

## Awards and Experience

### Event Mangement and Volunteering

*Aug 2023 - Present*

- Organized and hosted Cryptic Cadavers, a Capture the Flag challenge during Invente with the Coding Club.
- Conducted **EditaCTF 2.0** with my CTF team, Edita, to introduce and engage **20%** of the first and second year **student body** in cybersecurity challenges.

### Top 1% Global Ranking on TryHackMe [🔗](#)

*TryHackMe*

### 3rd Place - Password CTF [🔗](#)

*VITC - 29 Jan 2024*

### Finalist - Envithon, An Environmental Hackathon

*SNUC - 21 Feb 2024*

### Participated - SIH 2024, PEC Hacks 2024, Khacks 2025

*2024-2025*

## Certifications

### Social Networks - NPTEL [🔗](#)

- Studied the dynamics of social interactions and network structures.
- Applied graph algorithms to identify patterns and insights in social connections.

### Programming in Modern C++ - NPTEL [🔗](#)

- Ranked in the top 5% of course participants. Gained proficiency in modern C++ features, including smart pointers, object-oriented programming principles, and advanced use cases.