

# Kapsha Suraj Singh

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## EDUCATION

### RV College of Engineering

Bachelor of Technology Computer Science, Cyber Security

Bengaluru, India

Dec. 2023 – present

### VET BVL Polytechnic

Diploma in Computer Science and Engineering

Bengaluru, India

Dec. 2020 – Apr. 2023

## EXPERIENCE

### Cyber Security Intern [onsite]

Netty Brains

Mar 2023 – June 2023

Bengaluru, India

- Performed **Linux - System Administration** onsite
- Conducted **remote system maintenance** to ensure uptime and security
- Genuine Hands-on experience with CPU hardware troubleshooting and maintenance

### Industrial Training at Intel Unnati Program

May. 2024 – July. 2024

[virtual]

- Conducted Research on **image pixels processing** and analysis
- Explored and Utilized **open source software** (FOSS), including FFMPEG and UPSCAYL

## Achievements

- Reached the **GRAND FINALE** in Terra Tech **NATIONAL level** Hackathon Mar. 2024
- First prize in TECHBIZ@SJP **STATE Level Inter-College coding** competition May. 2023
- Achieved **2nd** prize in **State level** paper presentation held at VET College Feb. 2024
- 5 Star** C language badge in Hacker Rank 2021
- Published a paper** on “Temporal Analysis and **CWE Code Prediction** for Software Vulnerabilities using Machine Learning” at the 8th IEEE internal conference on CSITSS Aug. 2020 - Dec. 2024  
Paper ID - 943 [ [Paper - Link](#) ]
- Was able to Install **proprietary NVIDIA Drivers** [ for Arch Linux ] in 2024 for **GT 710** Nov. 2024  
[ which was brought around 2016 ]

## PROJECTS

### Bat | [Github](#)

Feb. 2025 – Present

Developing a Termux API script to **send emergency SMS** with GPS location (**lat/long, altitude, speed**) when Android battery drops below 10%.

- Works **100% offline**
- Uses Termux API (Android terminal emulator)
- Retrieves full GPS details **without internet**
- Adds low-battery alerts **unlike standard map** apps
- Minimalistic** codebase for efficiency

### CLI alternative to Syncthing | [Github](#)

May 2018 – May 2020

- Works across devices of any brand using **Tailscale** (no same-network requirement)
- Saves **~10%** time per transfer
- Provides notifications** when manual intervention is needed
- Maintains **SFTP connections** across devices with **dynamic IP**
- Supports media** playback
- Works with **external peripheral devices (EPI)** as a native shell

### CertiCrypt | [Github](#)

June - present

- CryptoGraphically Certified Academic Records

### Shadow\_Clone | [Github](#)

- Developed a custom ArchInstall script including setup for two display compositors

May. 2025 - present

## TECHNICAL SKILLS

**Languages:** Java, JavaScript, Node.JS, Bash, C, HTML/CSS, Python(basics)

**Developer Tools:** Linux [Arch], Git, Neovim, Vim, VCS, Nginx, Shell scripting, tmux, zsh

**System Operations:** Package management, rsync, syncthing, tailscale, Openssh, htop / btop / auto-cpufreq / lm-sensors

**UI / Display Compositors:** TTY, DWM, Hyprland, Gnome, KDE, GRUB-res

**Certificates:** NPTEL - Information Security 5, NPTEL – DSA in Java