# Kapsha Suraj Singh

Cyber Security Student - Bengaluru, India, 560078

Website Linkedin Github

#### **Work Experience**

• 3 months of Cyber Security Diploma Internship at Netty Brains

Bengaluru , India ; Mar 2023 – June 2023

- System Administration on Linux
- Remote System maintenance
- Hands-on CPU hardware maintenance at Netty Brains
- 3 months of Industrial Training of Intel Unnati Program

Online mode; May 2024 - Jul 2024

- Detection of Pixelated images achieved an accuracy of around 60%
- Python script automation to enhance the image using ffmpeg and embedded Bash
- Use of open source software [FOSS] like FFMPEG and UPSCAYL

#### **Key Skills**

- Programming Languages C, JAVA, PYTHON
- Front end HTML, CSS, JS
- Technologies VCS, automation using BASH scripting
- **Developer Tools** Linux, Git, Neovim, MariaDB

#### **Personal Projects**

 Working on Improvising Termux API location request to retrieve location data to send an emergency SMS when android battery goes below 10% Link: Github

Feb 2025- present

- 1. Works without internet [100% offline]
- 2. Termux [android terminal emulator] inherent API
- 3. Accurate location details latitude/longitude along with altitude and speed using GPS [ when offline] –
- 4. Popular map applications does allow location sharing with particulars but it doesn't notify when one has a low battery % after which the phone might die
- 5. Minimalistic code
- Automating **Secure remote file transfer** among devices of any brand [does not need to be Aug 2024 Sep 2024 in the same network]
- 1. Saves around 10% of time / on each transfer
- 2. Notifies when manual intervention is required
- 3. Maintains a SFTP connection among devices supporting dynamic IP
- 4. Supporting playing media
- 5. Can work with EPI [external peripheral devices ] as native shell
- Training Project at DHS informatics ,Jayanagar, Bangalore, Karnataka

Mar 2023-Jun 2023

#### Privacy Preserving Biometrics for Aadhar verification

- 1. Developed a website ensuring citizen data privacy using hashed credentials for secure storage.
  - 2. Added a hash layer to protect user data from tampering and enhance cloud security.

#### **Certifications**

<ul> <li>NPTEL - Data Structures and Algorithms using Java,</li> </ul>	Jul 2022 - Oct 2022
NPTEL – Introduction to Graph Algorithms	Jul 2024 - Sept 2024
• Infosys- Spring Board - Introduction to Cyber Security	Sept 2022 - Nov 2022
• IBM on Coursera - Getting started with Git and Github	Mar 2023 - Apr 2023

## **Career Highlights**

•	Reached the <b>Grand Finale</b> in Terra Tech <u>national</u> level Hackathon	Mar 2024
•	Achieved 2nd prize in State level paper presentation held at VET College	Feb 2024
•	First prize in TECHBIZ@SJP State Level Inter-College coding competition	May 2023
•	5 Star C language badge in Hacker Rank	2021
•	Was able to Install <b>proprietary NVIDIA</b> Drivers [ for arch] in 2024 for <b>GT 710</b> [ which was brought around 2016 ]	Aug 2024 – Dec 2024
•	Published a paper on "Temporal Analysis and CWE Code Prediction for Software	Nov 2024
	Vulnerabilities using Machine Learning" at the <b>8th IEEE internal conference on CSITSS</b>	

### Languages Known

Paper ID - 943

English, Hindi, Kannada, Telugu

#### **Interests**

Routine Automation, Bash scripting . Video editing( Kinemaster , adobe After Effects, kdenlive) ,Problem Solving, Programming , Football, Cricket , Cooking, Animation .

#### Education

Bachelor of Technology 3rd Year CSE – Cyber Security	2023 - present
RV College of Engineering; Bengaluru, India	
CGPA: 8.15	
Secured 148th Rank in State Common Entrance Test   2023	2023
Diploma in Computer Science and Engineering	Dec 2020 – Apr 2023
VET BVL Polytechnic; Bengaluru, India	
CGPA: 9.88	
10th CBSE	Jun 2016 - Sep 2020
Martin Luther Public School; Bengaluru, India	
Grade: 86.6 %	