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 Privacy Preserving

 Mar 2023-Jun 2023

 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

| • | NPTEL - Data Structures and Algorithms using Java, | 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 Grand Finale 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 proprietary NVIDIA Drivers [for arch] in 2024 for GT 710 [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 8th IEEE internal conference on CSITSS | |
| | Paper ID - 943 | |

Languages Known

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 % | |