

Aman Vijaykumar Singh

☎ (+91) 9892905295 | ✉ amanvijaykumarsingh7792@gmail.com | 🌐 aman-v-singh | 🎮 prince-7

Education

Indian Institute of Information Technology, Allahabad

B.Tech Electronics and Communication Engineering | CGPA: 8.82

August 2019 – Expected July, 2023

Experience

Google Summer of Code 2021 Developer

SecureTea Project

OWASP Foundation

May 2021 – August 2021

- Improved **Network Intrusion Detection** Module by adding 2 attack detection Modules (Used **Python3** module **Scapy**).
- Integrated Whatsapp Notification Module to alert user on attack detection. Used Twilio's Whatsapp sandbox API.
- Improved Website Defacement Detection Based on Machine Learning Techniques and Attack Signatures. Improved performance with detection accuracy of more than **99.26%** and a false positive rate of lower than **0.62%**
- Introduced Web Application Firewall Feature for filtering HTTP requests using Machine Learning Techniques, Accuracy of **98%** with **1.7%** False Positives.
- Developed the project Using Python3 and Git, Linux.

Awards and Achievements

Bug Bounty Hunter: Found many Security Vulnerabilities on multiple Programs on Platforms such as **@Hacker One** & **@Intigriti**

CSAW'20 CTF Finalist: Top 3 teams from India to Qualify for CSAW Cybersecurity Games Conference Finals.

InfoSec Writeups: Authored Articles that Featured on InfoSec-Writeups

Hacking Platforms: **Pro Hacker** on HacktheBox, **HACKER** on TryHackme, **PentesterLab**

Projects

Block-chain Simulator [Node.js (Express), HTML, CSS, JavaScript]

🔗 Code

January 2021

Website: **Block-Explorer**

- Implemented Block-Chain concepts such as proof-of-work, hashing, mining, consensus features, Implementation of Block-Chain, decentralized network using JavaScript classes & objects and hashing using SHA256 Algorithm.

Pygoat [Python3, Django, PostgreSQL]

🔗 Code

March 2021

Website: **Pygoat**

- OWASP's Intentionally Vulnerable Django Web application with OWASP Top 10 Vulnerability for Web Security Demonstration.

Face Reconnaissance [Reactjs, Node.js(Express), PostgreSQL.]

🔗 Code

October 2020

Website: **Face Recognition**

- Image processing API to detect face structures in the image. Implementation of user login and registration, password hashing along with user statistics information storage in database.

Relevant Skills

Language/Framework: Python | C++ | Javascript | Bash | SQL | Reactjs | Flask | Django | Express | NodeJS

Platforms: Linux | Web | Windows

Tools: Git | PostgreSQL | Docker | AWS

Other Skills: Content Writing | CyberSecurity/EthicalHacking | Communication | Team-Work | Management

Volunteer Experience

Cyber-Security Wing Member, Geekhaven, IIITA

Organized Cybersecurity Events as a member of Technical Society for 1 year.

Mentor For Aparoksha Month, IIITA

Mentoring 400+ Students about Web Security and Exploitation Technique by **presentation** and live online demonstration.

Core Team and Challenge Developer Lead B00T2Root CTF

Organised Worldwide CTF Event for 150+ teams. Developed and Deployed challenges.