

Vishnu Kamaraju

(906) 370-6589

Houghton, MI.
49931

77vishnu.k@gmail.com
www.linkedin.com/in/vishnu-kamaraju

SUMMARY

Strong engineering professional with a Master of Science degree in Cybersecurity looking to leverage my knowledge and experience into a role as a Security Engineer. Skilled in cybersecurity, penetration testing, embedded Linux development, intrusion detection, network protocols, and several programming languages.

EDUCATION

- **MS in Cybersecurity**
Michigan Technological University (MTU) | Houghton, MI | GPA 3.65
Sept 2018 – Dec 2020
- **BS in Computer Science**
Amity University | Noida, India | GPA 3.15
Aug 2013 – May 2017

TECHNICAL SKILLS

- Objective C • Port Scanning • Python • Cryptography • IDS/IPS • HIPAA • SQL • PowerShell • NIST
- HTTPS • OWASP TOP 10 • JavaScript • AWS • WAF • SIEM • Linux • PCI • TCP/IP • Nessus • C++ • IPSEC
- Splunk

WORK/INTERNSHIP EXPERIENCE

Michigan Technological University

Houghton, MI

Research Assistant

Feb 2021 –

- Worked as volunteer research assistant at **Security and Privacy Lab**.
- Commended by the head professor for accuracy and **communication skills**.
- Provided assistance in the development of reports, presentations, and **data analysis**.

Michigan Health Information Network

East Lansing, MI

Security Analyst

Sep 2019 – Aug 2020

- Optimized a **python** script for alerting of suspicious logins on work computers.
- Identified vulnerabilities in our systems and executed upgrade plans.
- Engineered **phishing attack** simulations and reduced the risk of email phishing by **26.6%**.
- Examined the **security policies** and implemented remediation plans.
- Performed **risk assessments** and successfully patched vulnerable servers.

Cyber Motion Technologies Pvt Ltd

Hyderabad, India

Software Developer

May 2016 - July 2016

- Built a **RESTful** web service that stores/retrieves solar water pumps data to/from **Postgresql** database.
- Created UML diagrams to explain database schema, user modules, and machine modules.
- Devised test cases to check the efficiency of remote monitoring over **Http** controller.

PROJECT EXPERIENCE

GitHub: <https://github.com/vishnucs50?tab=repositories>

Project 1: Revere-shell access using buffer overflow

Sep 2019-Oct 2019

- Program **fuzzes** every input field of an application to create a **buffer overflow**.
- EIP register's value is overwritten by a return address.
- Reverse-shell payload is included in the buffer space of EIP or EAX register preceded by a NOP sled.

- An active shell session to the victim's computer is presented to the user.

Project 2: SQL Poisoning using Burp Suite

Jun 2019 – Jul 2019

- The program **enumerates** every input field of an application using unsanitized data.
- The program triggers **Burp Suite** repeater tool as a **SQL** error occurs to capture requests and enumerate the database.
- Payload is inserted into the server's web root using php's INTO OUTFILE function.
- A reverse-shell session is presented to the user for the victim's computer.

Project 3: File Protection System using 2 factor authentication:

Jan 2019 - Mar 2019

- The C program allows a system admin to create access to authorized users for sensitive files on a network.
- The program adds a random **salt** to the user's password and stores the **hash** value on the server.
- A 6 digit OPT is generated if the user credentials matches with the ones stored on the server and sent to the user using **SMTP server** secured with a **TLS** encryption protocol.
- The program performs security event log analysis to validate password timestamps. The user remains locked out if the correct OTP is not entered within 90 seconds after receiving it.

CERTIFICATIONS

- **Cybrary** || compTIA Network+
- **Cybrary** || Penetration Testing and Ethical Hacking
- **Cybersecurity and Infrastructure Security Agency** || Mapping IT Defense-In-Depth Security Solutions to ICS
- **TestDome** || C++
- **IBM Cognitive Class** || Python for Data Science

COURSEWORK

- Advanced Computer Security
- Cryptography
- Digital Forensics
- Artificial Intelligence
- Network Security