Raghava Gatadi

4th Year Undergraduate
Computer Science and Engineering
Github — Linkedin — TryHackMe (top-7%)

Email : raghava.gtd@gmail.com
Email : 21bcs088@iiitdwd.ac.in
Phone : +91-9441190131

Myself, Raghava Gatadi, a cybersecurity professional with expertise in **incident detection** and **response**, reinforced by the **Google Cybersecurity Certificate**. I possess a solid understanding of **Governance, Risk, and Compliance** (**GRC**), along with hands-on experience in **ethical hacking**, **web security**, **firewalls**, **networks**, and **cryptography**, enabling me to effectively protect systems and data from diverse threats.

Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2021 - Present	B.Tech	Indian Institute of Information Technology, Dharwad	8.23/10
2021	XII	Nano Junior College, Hyderabad	98.6%

Skills

- **Programming Languages:** GO Lang, Python, C, C++, Java, Latex
- **Security:**
  - **Ethical Hacking:** scanning, exploiting, post-exploitation, payload writing in python, windows exploitation, msfvenom, metasploitable exploitation, msfconsole, nmap, nslookup, etc.
  - **Web-Testing:** BurpSuite, HTML injection, Command Injection, SQL injection, Bruteforcing, cross-site Site (XSS)
  - Incident response, security frameworks and controls, security hardening, Linux command line, SIEM tools
  - Knowledge in Networking, Cryptography, Firewalls, Incident Response
- **Web-Development:** HTML, CSS, Tailwind-CSS, JavaScript, Django, NodeJs, ExpressJs, SQL, MongoDB.
- **Tools and Frameworks:** SPLUNK, HIPAA, NIST CSF, FedRAMP, PCI DSS, NIST 800-39
- **Operating Systems:** Windows, MacOS, Linux

Key Projects

- **AES in Socket Programming** - *Github Repository*
  - implemented Advanced Encryption Standard (AES) encryption and decryption in socket programming.
  - The key mechanism allows the sender to attach a key with each message using a delimiter '~'. If no delimiter is found, the previous key is used.
  - Supports all variants of AES (128, 192, 256).
- **Password Manager** - *Github Repository*
  - Developed a secure and efficient command-line password manager using Python. The password manager utilizes MySQL to securely store passwords.
  - Key features include a user-friendly command-line Line Interface, Master Password Validation, Password Management, Clipboard Integration, and Random Password Generation.
  - Ensures confidentiality by not displaying passwords during input and directly copying retrieved passwords to the clipboard.
- **Vulnerability Assessment and Exploitation of Metasploitable** - *Report*
  - **Tools**: Nmap, Nessus, Metasploit, Kali Linux, Github scripts
  - **Objective**: Conducted vulnerability assessment on the Metasploitable virtual machine using Nmap and Nessus, followed by exploitation using Metasploit.
  - **Key exploits**: FTP, SSH, Telnet directly
- **Network Scanner** - *Github Repository* : The Python script accepts the user's network IP address as input and provides information about connected devices, including their MAC addresses and open ports.
- **Quantum Club IIIT-Dharwad Website** - *Project Link*
  - Developed the website for Quantum Computing Club IIIT Dharwad as a Full-Stack developer.
  - Contributed to creating the Blog page for Quantum Computing Club IIIT Dharwad.
  - Languages: HTML, Tailwind-CSS, CSS, Django.

Research Projects

- **PUF Based Hardware Security Research** Aug 2024 - Present
  - Researching PUF (Physically Unclonable Function) models for hardware security, with a focus on reviewing key papers.
  - Planning to conduct cryptanalysis on several PUF models to identify vulnerabilities and enhance security.
  - Working towards developing a unified model that can replace two or more existing PUF models to improve efficiency and security.

- **Fake News Detection** - *Github Repository* Jan 2024 - Apr 2024
  - Conducted in-depth research on existing fake news detection methods by reviewing multiple papers.
  - Identified potential improvements and implemented Deep Learning and NLP models like TF-IDF, BERT, Word2Vec, and Word Embedding.
  - Achieved significant accuracy improvements on Truthseeker dataset compared to its previous papers.

Experience

- **New York University Secure Systems Lab**, Intern/Open Source Contribution May 2024 - Aug 2024
  - Project: Gittuf - Building a New Security Layer for GitHub
  - Contributed issues: git command compatibility(Experimental), windows display test(main)
  - Collaborated with cybersecurity professionals, actively participated in team discussions and shared innovative ideas to enhance project results.
- **Mastercard Cybersecurity** virtual experience program on Forage - Link December 2023
- **JP Morgan Chase Co Cybersecurity** virtual experience program on Forage - Link February 2024
  - Analyzed a large dataset of fraud in financial payment services.
  - Learned application security fundamentals and applied them.
  - Built an email classifier to distinguish between spam and ham.

Relevant Courses

Data Structure and Algorithms	Calculus
Design and Analysis of Algorithms	Linear algebra and Differential Equations
Operating Systems	Computer Networks
Cryptography	Quantum Computing
Networking and Security, Cisco →	Cybersecurity Specialization by Google, Coursera →
Ethical Hacking, Udemy, A-Z academy	Web-Security and Bug Bounty, Udemy, A-Z Academy
Networking, Coursera, Google →	Governance, Risk, and Compliance(GRC)