# **BHARGAVA KIKKURU**

(312) 989-9914 | bhargavakikkuru@gmail.com | Linked-in: kbreddy | GitHub: bhargava-k

#### **SUMMARY**

Cybersecurity professional with 4+ years of experience in penetration testing, vulnerability identification, and security assessments. Adept at managing advanced security initiatives within AI, software engineering, and the software development lifecycle. Proficient in deploying cutting-edge security solutions, enforcing security policies, and reducing operational disruptions. Skilled in AI security and committed to leveraging emerging technologies to reduce risk exposure and minimize data breaches, thereby preserving organizational reputation and achieving business objectives.

#### **EDUCATION**

Illinois Institute of Technology, Chicago, IL

**Expected December 2024** 

## **Master of Cyber Forensics and Security**

**Relevant Coursework:** Vulnerability Analysis and Control, Cyber Security Technologies and Management, Cloud Computing Security, Active Cyber Defense, Vulnerability Analysis, Database Security, and Legal and Ethical Issues in Information Technology

Jawaharlal Nehru Technological University Hyderabad, IN

December 2022

#### **Bachelor of Computer Science**

### **SKILLS**

**Programming:** Python, Java, C, C++, Shell, Bash, PowerShell, JavaScript, C#.

Operating Systems: Linux (Ubuntu, Ubuntu Server, Kali Linux), Windows, MacOS.

Networking: Router Configuration, Firewalls, VPNs, TCP/IP, Network Security

**Technical Skills:** AWS, Node.js, Pandas, HTML5, CSS3, XML, JSON, JavaScript, Bitnami, WordPress, Incident Response, Cryptography, Digital Forensics, Vulnerability Assessment, Threat Detection and Management, Phishing, Identity Access Management (IAM), NIST SP800-53 Rev 4, SIEM, SOAR, ISO/IEC 27001, HIPAA, OWASP, OSINT, SOC, Malware Detection and Analysis, Logging and Log Analysis, Governance and Compliance, Threat Modeling, Risk Assessment, CAN Bus Exploitation.

**Cybersecurity Skills:** Monitoring and Log Analysis, Threat Analysis and Detection, Risk Analysis and Mitigation, Incident Response, Audit and Compliance, Implementing Identity and Access Management (IAM), Phishing, Threat Analysis, Risk Assessment, Threat Modeling

**Tools:** Wireshark, Burp Suite, Nmap, Metasploit, Nessus, Snort, Ghidra, Splunk, Hydra, John the Ripper, FTK Imager, Paraben E3, Autopsy, Sqlmap, Spiderfoot, Nikto, Suricata, OpenSSL, Maltego, QualysGuard Vulnerability Scanner, ZAP, Yara, Zeek, Brim, Sysinternals, Sysmon, Wazuh EDR, ELK Elastic Stack, TheHive Project, PhishTool, KAPE

AWS Services: EC2, Lambda, S3, DynamoDB, SQS

#### CERTIFICATIONS AND EXTRACURRICULAR

- Certified Cyber Security Technician (CCT) EC-council.
- TestOut CyberDefense Pro TestOut Corporation.
- Advanced Ethical Hacking: Mastery AI & ChatGPT Udemy.
- Tata Cybersecurity Security Analyst Job Simulation on Forage July 2024.
- Goldman Sachs Software Engineering Virtual Experience Program on Forage May 2022.

#### **EXPERIENCE**

#### DevSecOps, Chotu

December 2020 - September 2022

- Achieved a 10% efficiency boost in automated penetration testing, fortifying application security and resilience.
   Communicated findings and recommendations to cross-functional teams to ensure prompt remediation.
- Developed and enforced robust security management protocols to conduct comprehensive vulnerability assessments and remediation. Collaborated with stakeholders to prioritize and address critical security tasks.
- Designed and deployed a secure AWS-integrated cloud infrastructure, increasing deployment efficiency by 15%.
   Collaborated on technical requirements and integrated security solutions seamlessly with development teams.

 Created data optimization strategies and computerized processes using Python, reducing server load. Improved CDN delivery and optimized web server security by implementing effective technical solutions.

#### **Quality Assurance Coordinator**, Madiee Games

January 2019 - December 2020

- Orchestrated live server monitoring, collaboratively addressing bugs with the team to enhance system stability and user experience, resulting in a 20% decrease in downtime.
- Led automated testing initiatives utilizing Python and Selenium, presenting findings and coordinating with stakeholders to ensure timely issue resolution, resulting in a remarkable 30% enhancement in user satisfaction.
- Conducted testing on the Dashboard to protect it against cyber vulnerabilities, ensuring uninterrupted gameplay for 1,000+ concurrent users.

#### **PROJECTS**

## **Python Keylogger**

- Crafted a multi-faceted keylogger in Python, capturing 5 data streams (keystrokes, system info, clipboard, audio, screenshots) with encryption for enhanced security.
- Orchestrated 7 diverse Python modules (Pynput, pywin32, scipy, cryptography, Pillow, sounddevice, email) for smooth functionality, showcasing comprehensive coding expertise.
- Engineered a timer-controlled system for scheduled data capture and email delivery, streamlining operations and boosting efficiency by 40%.

#### **Cyber Security Home Lab Setup**

- Designed and built a comprehensive cybersecurity home lab to simulate a business network environment and gain hands-on experience in IT and cybersecurity concepts.
- Established robust security measures, including firewall configurations, VPN server setup, and vulnerability scanning, showcasing hands-on cybersecurity skills.

#### **Interview Proxy Detection System**

- Developed a covert Python application to safeguard interview integrity by discreetly monitoring candidates' computers.
- Crafted a seamless user experience by developing an intuitive mechanism where the application dynamically
  generates a unique URL for each candidate, reducing interview setup time by 50% while ensuring minimal
  disruption to the process.
- Engineered the application to stealthily scan the candidate's system for running applications, detecting an average of 20-30 concurrent processes per assessment, ensuring a comprehensive evaluation of the digital environment.
- Employed advanced encryption protocols to securely transmit detailed reports to interviewers, resulting in a 30% reduction in data breaches during candidate evaluations, increasing confidentiality and decision-making efficiency.

## **OSNIT Application**

- Engineered a user-friendly GUI application using Python and Tkinter for efficient social media data scraping.
- Ensured secure and private data retrieval from Twitter, Facebook, and Instagram, adhering to ethical standards and platform policies without storing user data.
- Conducted testing on the Dashboard to protect it against cyber vulnerabilities, ensuring uninterrupted gameplay for 1,000+ concurrent users.

#### **Plant Disease Detection**

- Led a team in developing a Python-based tool for diagnosing crop diseases using deep learning, resulting in a 25% increase in agricultural productivity and improved plant health across 500+ farms.
- Utilized convolutional neural networks trained on public datasets of over 50,000 plant images to achieve a 95% accuracy rate in disease identification.
- Designed a user-friendly interface, enabling over 1,000 farmers and agricultural professionals to easily upload images for immediate disease diagnosis and suggestions for remedies.
- Collaborated with interdisciplinary teams to refine algorithms and models, ensuring the tool's applicability and reliability in diverse agricultural settings, ultimately reducing crop loss by 30%.