# **Pranav Sudeendra**

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### Education

### Northeastern University, Boston, MA

- Khoury College of Computer Sciences
- Master of Science in Cybersecurity
- Related Courses: Network Security, Fundamentals of Cybersecurity, Wireless and Mobile Network Security
- PES University, Bengaluru, India
- Bachelor of Technology in Electronics and Communication Engineering
- Minors in Computer Science and Engineering
- Related Courses: Computer Networks, Operating Systems, Computer Architecture.

### **Technical Skills**

**Programming Languages:** Python, Bash, C/C++, SQL, MATLAB Security Tools: GNS3, Wireshark, Aircrack-ng, Hashcat, Nmap, OpenSSL, GPG Environment and Tools: Selenium, Jenkins, ElasticSearch, Git, Jira, Postman

## **Professional Experience**

AI Palette, Software Intern

- Feb 2024 August 2024 - Developed and automated over 50 Python and Selenium scripts for UI/UX validation, reducing manual testing by 80% and achieving 95% test coverage during platform migration, with zero critical bugs.
- Led the transition from the old to the new UI/UX, integrating Jenkins into CI/CD pipelines, which boosted test execution speed by 40% and improved deployment reliability.
- Worked with cross-functional teams to deploy ElasticSearch (ES), improving system stability and minimizing post-migration issues.

### Certifications

- Cisco Certified Network Associate (CCNA) Click

- CompTIA Security+ ce Certification Click

# Projects

#### The Fortress: Enterprise Network Security and Troubleshooting

- Designed, configured, and troubleshot enterprise-grade networks with network security features, including port security, firewalls, and VPNs, ensuring confidentiality, integrity, and availability.
- Conducted network performance analysis, applied security best practices to mitigate potential vulnerabilities and simulated real-world scenarios, identifying and resolving security breaches.

#### Crack, Attack, and Defend: Real-World Wi-Fi Security Testing

- Executed an in-depth exploration of wireless network vulnerabilities using IEEE 802.11 protocols and cutting-edge tools like Aircrack-ng, and Wireshark on networks protected by WEP and WPA2.
- Configured a malicious AP using Hostapd and simulated phishing attacks to capture sensitive device traffic. Analyzed rogue network behaviour using Wireshark for vulnerability exploitation.

### SDR Chronicles: Building, Breaking, and Securing Wireless Systems

- Developed and implemented projects exploring the intersection of software-defined radio (SDR) technology and wireless security.
- Leveraged GNU Radio and SDR platforms to design a working FM receiver and transmitter and to execute a cybersecurity attack on a wireless doorbell system.

### **Research** Publications

Kannada Subtitle Generation with Speaker Diarization: A Comprehensive Solution for Regional Language Visual Media Accessibility. Click

Sept 2020 - May 2024

Sept 2024 -Present