# **Om Venugopal**

# College Park, MD | om.lakshmi.59@gmail.com | om-vg.github.io | OmLakshmiShanthi

### **EDUCATION**

**University Of Maryland** 

College Park, MD

Expected: May 2023

M. Eng. Cybersecurity (GPA: 4.0)

Relevant Coursework: Network Security, Security Tools for Information Security, Penetration Testing,
Info Sec Tools, Secure Operating System

### **PSG College of Arts & Science**

Coimbatore, IN

B.Sc. Computer Science (GPA: 8.2)

March 2020

• Relevant Coursework: Cryptography, Information Security, Database Systems, Computer Networks

### **SKILLS & INTERESTS**

**Programming Languages:** C, C++, JavaScript, HTML/CSS, Python, PHP, Java, SQL **Frameworks & Software:** Wireshark, Bootstrap, UNITY, React, .NET, Salesforce

Operating Systems: Windows, Kali Linux, Ubuntu Linux, Mac OS

Tools & Technologies: Git, AWS (S3), MS Office, Nmap, Metasploit, Burp Suite, the Harvester

**Certifications:** Security+ (expected 2022)

### **WORK EXPERIENCE**

# **Pricewaterhouse Coopers SDC**

Bengaluru, IN

Quality Management Specialist

*May 2021 – July 2021* 

- Conceptualized test strategies, test plans, and execution based on the project's specifications in both manual and automation testing (Salesforce).
- Defect reporting, tracking, verifying retest results, and helping in test-driven development to find defects at early stages.
- Assumed a proactive approach to remain up to date with evolving technologies that impact current services.

# **Codingmart Technologies**

Coimbatore, IN

Frontend Development Intern

*July 2020 – Nov 2020* 

- Utilized existing codebase to redesign user interface to provide faster loading times and a futuristiclook on an eCommerce project.
- Worked to enhance and maintain the codebase (HTML, CSS, JS) used in pre-show templates, which resulted in reducing production time by 50%.
- Designed and implemented new webpage templates on the front-end development team.

### **PROJECTS**

# Advanced Exploitation Techniques for x86 Architecture | GDB, Assembly

December 2021

- Problem solved and reverse engineered to find the exploits for 10 binaries with ASLR (Address Space Randomization) turned on.
- Exploited the vulnerabilities in ASLR using Heap Buffer Overflows and Return Oriented Programming.
- Created the shellcode and deduced the NOP Slide required to overwrite the return address to point to the heap, text, data or bss regions.
- Documented and a write up on the vulnerable Binaries and how to exploit them.

# Penetration Test - Masked DJ | Metasploit, NMap, JohnTheRipper

December 2021

- Conducted a comprehensive security assessment for the IT Environment of a hypothetical Masked DJ
- Managed a team of 3 to perform Penetration Test and deliver a report to the Masked DJ to secure their system from any existing vulnerabilities.
- Breached and retrieved confidential information from the AWS account.
- Used NMap for reconnaissance, MS17-010 Eternal blue in Metasploit and JohnTheRipper for privilege escalation and Metasploit for Living-Off-the-Land.