

Tarun Ayyagari

602-723-8393 • tarun.aygr@gmail.com • [linkedin.com/in/tarun-ayyagari/](https://www.linkedin.com/in/tarun-ayyagari/)
• github.com/tarunaygr/ • tarunaygr.github.io/

EDUCATION

Master's in Science Computer Science

Expecting May 2024

Arizona State University, Tempe, AZ

4.00 CGPA

Relevant Coursework: Information Assurance and Security, Software Security, Advanced Computer Network Security, Computer and Network Forensics, Applied Cryptography, Computer Systems Security, Computer Systems Security

B.Tech. Computer Science and Engineering

May 2022

National Institute of Technology Calicut, Kerala, India

8.16 CGPA

Relevant Coursework: Data Structures and Algorithms, Database Management Systems, Operating Systems, Computer Security, Computer Security Lab, Number Theory and Cryptography, Computer Networks, Computer Networks Lab

TECHNICAL SKILLS

Programming Languages: C, C++, C#, Python, JavaScript, Bash

Tools, Databases, and OS: PostgreSQL, MySQL, Ansible, Git, GitHub, Windows, Unix/Linux, gdb, vagrant

Computer Security: Burpsuite, Metasploit, Pfsense, Wireshark, tcpdump, Tor, OWASP DVWA, [pwn.college](https://www.pwn.college/), IDA, gdb, linux sandboxing, return oriented programming, binary reverse engineering, binary exploitation, x86 assembly

Forensic Analysis: ProDiscover, FTK Imager, dd, Active Disk Editor, kitphishr, hexed.it, Autopsy, Volatility

Certifications: CompTIA Security+

PROFESSIONAL EXPERIENCE

EdPlus at ASU, Tempe, USA: Unity Developer Assistant (Part Time)

12/2022 - Present

- Developed Extended Reality (XR) experiences for ASU Online courses in **Unity**
- Worked with Dreamscape Learn (DSL) to deliver immersive educational experiences
- Responsible for planning and implementing game functionality and VFX, identifying bottlenecks and ensuring quality

Cisco Systems, Bangalore, India: Technical Undergraduate Intern

05/2021 - 07/2021

- Developed a tool for automation of deployment of virtual switches and routers on VMware ESXi server using **Python** and **Ansible**
- Formulated a **Python** script to automate the configuration of deployed virtual machines
- Deployed tool for internal use at Cisco Systems

RELEVANT PROJECTS

Packet Analysis with Wireshark, Course Project

Spring 2023

- Analyzed **packet captures** from previous attacks using **Wireshark** and **tcpdump**
- Identified vulnerabilities exploited in the attacks
- Detected attack patterns and methods to circumvent detection

Pfsense Firewall, Course Project

Fall 2021

- Deployed a **local area network using virtual machines**
- Implemented a **firewall using Pfsense and additional packages**
- Setup **firewall rules, blacklists, rate limiters, NIDS using Snort and firewall logs**

Exploring Lightweight S-boxes Using Cellular Automata and Reinforcement Learning, Research Project

Spring 2022

- Used Reinforcement Learning to design Cellular Automata based S-boxes with good cryptographic properties
- Paper accepted into Cellular Automata for Research and Industry (ACRI) 2022 Conference
- Won Best Project of BTech CSE 2022 Passouts

Keystroke Logger, Course Project

Spring 2022

- Built a keystroke logger using **Python**
- Program is disguised as a game which when run, starts logging keystrokes and sends to a listener IP address

System Log Auditor, Course Project

Fall 2022

- Developed an automated log auditor for **Linux machines**
- Auditor can **trace system functions** made and program interaction given a specific log entry of a process
- Outputs a **visual graph** of the process activities

EXTRACURRICULAR EXPERIENCE

National Institute of Technology Calicut, Kerala, India: Placement Representative for CSE

05/2021 - 05/2022

- Coordinated job placement activities for final-year Computer Science students
- Represented concerns of Computer Science students regarding the placement process