

Gokulkrishna P Menon

+1 (480) 241 2271
✉ gkgokulkrishna33@gmail.com
🌐 gokulkrishna.com

Objective

As a Master's student majoring in Computer Science with a strong interest in cybersecurity, I seek a challenging role in cybersecurity that utilizes my technical skills, passion for security, and seven years of experience in CTF contests and open-source contributions. I aim to apply my knowledge in programming languages such as C, Python, and PHP and my expertise in security vulnerability categories and bug disclosure practices to help secure computer systems against potential threats.

Work Experience

- 2018 to present **Arizona State University**, *Security Researcher at SEFCOM*, Actively worked on improving fuzzing techniques on Linux Binaries.
- 2018 to present **Arizona State University**, *International Capture The Flag(CTF) player with Shellphish*, Actively participates in Capture the Flag hacking contest with focus on security challenges in the area of Reverse Engineering and Web Security, <https://shellphish.net/>.
- 2015-2018 **Amrita University**, *International Capture The Flag(CTF) player with Team Bi0s*, Actively participated in Capture the Flag hacking contest with focus on security challenges in the area of Reverse Engineering and Web Security, <https://bi0s.in>.

Teaching Experience

- 2023 **Teaching Assistant for CSE 365**, *Introduction to Information Assurance course, assisting Dr. Fish Wang in lectures, grading, and mentoring over 100 students, while improving course content with fellow TAs.*
- 2019 **Teaching Assistant for CSE 365**, *Conducted sessions, graded assignments, and provided mentoring and support to students for Introduction to Information Assurance course.*
- 2019 **Teaching Assistant for CSE 598**, *Took sessions and graded assignments as a teaching assistant for Dr. Tiffany Bao in CSE 598 - Computer Security: Techniques and Tactics course.*

Education

- 2019-2023 **Masters in Computer Science**, *Arizona State University, Tempe, Arizona.*
(Expected)
- 2014-2018 **Bachelors in Computer Science and Engineering**, *Amrita University, Kollam, Kerala.*

Publications

- 2022 **Arbiter: Bridging the Static and Dynamic Divide in Vulnerability Discovery on Binary Programs**, Jayakrishna Vadayath, Kyle Zeng, Nicolaas Weideman, **Gokulkrishna P Menon**, Yanick Fratantonio, Davide Balzarotti, Adam Doupé, Tiffany Bao, Ruoyu Wang, Christophe Hauser, and Yan Shoshitaishvili, in Proceedings of the USENIX Security Symposium.

Achievements

- 2020 **CVE 2019-14769, 14770, 14771**, Discovered two Cross Site Scripting and one Remote code execution bug in Backdrop Content Management System.
- 2019 **NullCON CTF**, As part of Shellphish, secured first position.
- 2018 **BlackHat Asia**, Awarded scholarship to attend BlackHat Asia 2018.
- 2016 **CSAW Capture The Flag Finals**, As part of team bi0s, secured first runners up position.

Workshops

- 2017 **Web Application Security workshop**, As part of Team bi0s, conducted a two-day workshop in Sree Narayana College of Engineering, Kochi, India.
- 2017 **InCTF**, Organized and authored challenges for the International Capture the Flag contest in 2015 and 2017 as part of Team bi0s..
- 2016 **InCTF Junior**, Organized InCTF Junior, a Capture the Flag style contest aimed at cultivating cyber security awareness and training in high school students.
- 2016 **PSG College Of Technology**, Workshop on Web Application Security for Professionals as part of annual PSG Tech Cyber Security awareness week, Coimbatore, India.

Project

- 2019 to present **FlakJack**, Actively working on a framework to improve fuzzing by dynamically patching the Linux binaries to find deeper bugs, The objective is to develop a framework that dynamically patches crashes discovered during fuzzing to enable the discovery of deeper bugs in Linux binaries.
- 2021 to present **Open-Source Contribution**, Contributes and maintains open-source binary analysis framework Patcherex and improved Phuzzer, a python wrapper for interacting with fuzzers such as AFL.
- 2018 **Privacy badger extension**, Developed an extension for Google Chrome to tackle browser fingerprinting and offers protection against Canvas Fingerprinting and Spectre attack, <https://github.com/Web-privacy/Privacy-Extension>.

Technical skills

Languages C, C++, Python, PHP, JavaScript, MySQL