Giridhar Prasath Rajendran

cristianoprasath@gmail.com | giri1337@umd.edu | +12404139793 | College Park, Maryland USA | LinkedIn | Blog

EDUCATION

UNIVERSITY OF MARYLAND | M.ENGG CYBERSECURITY College Park, MD, USA | Aug 2023 - May 2025 Coursework: Applied Cryptography, Pentesting, Software Security, PL Security, Cloud Security, ML Security

- Published a research report on homomorphic encryption, solved CTF-style PQC challenges, and explored recent research on lattice-based postquantum cryptography. Blog-Post
- Solved user-space and kernel-space heap exploitation challenges on pwn.college dojos, focusing on Linux kernel exploitation as part of the ENPM809V course.

AMRITA VISHWA VIDYAPEETHAM | B.Tech Computer Science Coimbatore, KA, IND | Jul 2015 - Jul 2019 Coursework: Operating Systems, OOP, Data Structures and Algorithms, Compilers, Computer Networks

EXPERIENCE

GOOGLE SUMMER OF CODE | CONTRIBUTOR

Remote - USA | May 2024 - Aug 2024

- Improved ROP gadget discovery and classification by implementing constraint parsing techniques and wrote unit test cases for different architectures using Rizin APIs and MinUnit.
- Developed Rz-Solver, an ROP SMT solver plugin utilizing Rizin analysis plugins and Rizin IL APIs to strengthen binary analysis and constraint solving. (WIP)

VMWARE TANZU(BROADCOM) | Member of Technical Staff - 2 Bengaluru, IND | Sep 2021 – Jul 2023

- Refactored process discovery and report generation features in containerization services, enhancing security monitoring and integrating SAST into GitLab CI pipelines for continuous vulnerability assessment.
- Fixed critical security vulnerabilities in VMware Tanzu Application Transformer, built a secure API gateway for user-facing APIs, and wrote unit tests for CSRF and SSRF attacks.

VERSA NETWORKS | SECURITY SOFTWARE ENGINEER

Bengaluru, IND | Jul 2019 - Aug 2021

- Developed secure and maintainable code for SASE products (user-space network security) such as Captive Portal, URL Filtering, and User Identification modules, deployed across multiple customer sites.
- Mitigated critical vulnerabilities by debugging memory and performance issues using Valgrind and sanitizers (ASAN, TSAN) and by implementing unit/regression tests with internal POCs.
- Added essential control-plane CLI commands to Versa OS which is critical for debugging during customer escalations.

VERSA NETWORKS | GRADUATE ENGINEER TRAINEE

Bengaluru, IND | Jan 2019 - Jun 2019

· Built a secure API gateway with RBAC, ABAC, and OAuth-based authorization using KoaJS.

SKILLS

LANGUAGES: C, Java, Python, Assembly(x86-64, ARM64) Bash, Golang

TECHNOLOGIES: Systems Programming, Binary Exploitation, Reversing, Web Development, DevOps

FRAMEWORKS: Protobuf, Valgrind, Pwntools, Ghidra, Rizin, GDB, LLVM, AFL, ASAN, TSAN

PROJECTS

OXDEADFEED | C, Protobuf, Makefile, Bash https://github.com/giridharprasath/oxdeadfeed Message passing client-server application to understand epoll i/o multiplexing and asynchronous tasks

OPEN SOURCE CONTRIBUTIONS | C, GDB, MINUNIT, PYTHON https://github.com/giridharprasath
Actively contribute minor patches and report issues in JEmalloc, Linux, and the cve-bin-tool.
Implemented Tcache parsing per thread feature which helps to debug heap in multithreaded linux binaries.

NOTABLE CONTRIBUTIONS

- Ranked 2 nationally and 33 globally CTFTime 2021. Organized and co-authored web and reversing challenges for DarkCTF 2020. Played 25–50 ranking CTFs as part of Team DarkArmy.
- · Reported heap-based buffer overflow in ffproxy on huntr.dev while fuzzing CLI args.
- Authored a **PagedOut** blog post on thread-level storage and tcache parsing in glibc.
- Honorable mentions in ICPC Regionals 2017, 2018 (ICPC Amritapuri, Chennai)