Niraj Sharma

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Education

- **UIT, Karnavati University** — Ahmedabad, India
  Bachelor of Science - Computer Science; GPA: 7.8 — *August 2022 - Present*
  Courses: *Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases, LLM*

Skills Summary

- **Languages**: Python, C, C++, Assembly, SQL, Bash, Powershell, Solidity
- **Tools**: Metasploit ,WinDbg, IDA, Ghidra, SysInternals, Docker, GIT, PostgreSQL, Kicad, Fusion 360
- **Platforms**: Linux, Web, Windows, Arduino, Raspberry, AWS, GCP, IBM Cloud
- **Soft Skills**: Leadership, Event Management, Writing, Public Speaking, Time Management

Experience

- **Penetration Tester - Aitron** — On-Site
  Security Intern (Full-time) — *July 2025 - Present*
  - **Conducted Blackbox Testing on embedded device and network**: Extensively testing of the embedded device.
  - **Vulnerability Patching**: Patched the vulnerabilities found during testing
  - **Documentation**: Documented vulnerabilities and advised on prevention.

Projects

- **GreenCertify - Blockchain Based Certification Platform (BlockChain, ERC721,IPFS, Batch Process, APIs)**: (Work in progress) Developed and managed a blockchain-based platform for issuing soulbound certificates, ensuring secure, verifiable, and tamper-proof digital credentials. Tech: TypeScript, Solidity, NodeJS, ERC721, Pinata (November '24)
- **TinyOS (Operating System, Low-Level Programming)**: (Work in progress)Developing a basic operating system kernel from scratch using C and x86 Assembly. . Tech: C, C++, Assembly, Make , qemu (April' 25)
- **Obfuscation - Deobfuscation Toolkit (RSA, steganography)**: Developing a command-line toolkit for obfuscation and deobfuscation, enhancing malware analysis and development by enabling multi-layered code transformation and reverse engineering insights. . Tech: Python, GCC, LLVM (January '25)
- **Binary Analysis Toolkit (Binary Analysis, CLI, VirusTotal, Hashes, Strings, YARA)**: Developed a Binary/Malware Analysis toolkit on CLI. It provides information like AI -Powered Sting Classifier, Assemble Decompiler, Multiple Hashes and YARA-rules generator. Tech: Python, APIs (December '24)

Articles

- **Malware Analysis: RemcosRAT(Trojan, Stealer, RCE)**: A detailed analysis of the malware. Studies Evasion techniques and Persistence Maintainance. Tech: Ghidra, x64dbg, Windows INternal tools (October '24)
- **Malware Analysis: NetSupport(Windows,C2, Trojan, Delivery)**: Article provides delivery Mechanism, IOC's and detailed analysis of the binary and payloads. Tech: Ghidra, WireShark, DetectItEasy, ProcMon.(September '22)
- **Advanced Hardware Fuzzing(AFL++, Fuzzing, Injections)**: Wrote an article on Fuzzing hardwares and kernels to find crashes and vulnerabilities.(September '24)

Honors And Awards

- Winner at in-house CTF at University level - August, 2023
- Winner MUN - December, 2024
- Solved 60+ Machines on HackTheBox - May, 2022 - Present]

Volunteer Experience

- **Society President at University CyberSecurity Club** — Ahmedabad, India
  Conducted online and offline technical impacting over 100 students. — *Jan 2019 - Present*
- **Event Organizer at Model United Nations** — Ahmedabad, India
  Organized event Portfolio Distribution and conducted the Event for over 50+ students — *Jan 2024*
- **Speaker Session at University on Security** — Ahmedabad, India
  Delivered a lecture on Malware Analysis and development to over 70+ students — *Jan 2024*