Nikhil Prakash Jayaprakash Saridhakumari

≥ jayapran@purdue.edu, nikhilprakash.js@gmail.com · • +1 (765) 543-5497 · in/nikhil-prakash-j-s-1b31771b4 EDUCATION

Purdue University

West Lafayette, Indiana, US

Master of Science in Computer Science; Specialization: Cybersecurity; GPA: 3.3/4

Aug. 2023 - May. 2025

Relevant Courses: Information Security, Cryptography, Network Security, Software Security, Security Analytics, Legal Aspects, Data Communications & Networks.

SRM Institute of Science and Technology

Bachelor of Technology in Computer Science and Engineering; GPA: 9.29/10

Chennai, TN, India Jul. 2019 - May. 2023

Professional Experience

• Purdue Systems Security

West Lafayette, Indiana, USA

Oct 2024 - Present

 $Cybersecurity\ Awareness\ Associate\ for\ Information\ Assurance$

- Promoted cybersecurity best practices, planned awareness events, created cybersecurity content, and assisted with web development for various websites.
- Managed KnowBe4 self-phishing campaigns, user account administration, monitored cyber trends, wrote articles, and handled support tickets for cyberaware@purdue.edu.

• CyberTruck Challenge

Detroit, Michigan, USA

Participant in Heavy Vehicle Cybersecurity Challenge

Jun 2024

- Analyzed CAN Bus systems to detect and mitigate threats. Collaborated with experts and peers, gaining practical experience in protecting heavy vehicles from vulnerabilities.
- Spearheaded the team and identified vulnerabilities that allowed me to take control over CAN systems and, subsequently, the vehicle.

• Cybernaut Edu Tech LLP

Chennai, TN, India

Feb 2020 - Aug 2020

Application Developer Intern

- o Platforms Utilized: Android Studio, Google Firebase, Figma, Visual Studio Code, Microsoft Azure.
- Led webinars on app development using Android Studio and Java, increasing edu-tech enrollment.
 Enhanced full-stack development and mentorship skills through hackathons and team collaboration.

SKILLS SUMMARY

- Programming & Scripting Languages: C, C++, Java, Python, Bash, JavaScript, SQL, Shell Scripting.
- Technologies and Other Skills: Ghidra, Wireshark, Nmap, OpenSSL, Gcrypt, Binary Ninja, GDB, SavvyCAN, J1939 Tools, CANalyzer, BusMaster, PCAN-Explorer, Docker, Kubernetes, Git, Jenkins.
- Certifications: Ethical Hacking, Full Stack Development, and Python Programming from MyCaptain Edu Tech.
- Hackathons: Led bot function implementation at Yellow Messenger 2020; Optimized development processes and collaboration tools at Ivyhacks 2020.

PROJECTS AND PUBLICATIONS

• Kaminsky DNS Cache Poisoning

Jan 2024 - May 2024:

- Configured DNS servers and implemented spoofing techniques to poison DNS caches and redirect traffic to malicious sites.
- Demonstrated the security flaws in DNS protocols and emphasized the importance of DNSSEC.

• Padding Oracle Attack Simulation

Aug 2023 - Dec 2023:

- Designed and executed Python scripts to exploit vulnerabilities in CBC-mode encryption, adjusting encrypted data and analyzing server responses.
- Successfully decrypted ciphertext, showcasing the risks associated with insecure padding in encryption.
- - Designed a camera-based system to detect driver drowsiness in trucks, addressing a key cause of road accidents.
 - The prototype effectively identified fatigue, earning recognition for its potential in accident prevention.
 - o Link: restpublisher.com/articlejame/10-46632-jame-2-2-4