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; GPA: 3.3/4 — *Aug. 2023 – May. 2025*
  Relevant Courses: Information Security, Operating Systems, Network Security, Software Security, Security Analytics, Database Management & Systems, Data Communications & Networks.
- **SRM Institute of Science and Technology** — *Chennai, TN, India*
  Bachelor of Technology in Computer Science and Engineering; GPA: 9.29/10 — *Jul. 2019 – May. 2023*

Professional Experience

- **Purdue Systems Security** — West Lafayette, Indiana, USA
  Cybersecurity Awareness Associate for Information Assurance — *Oct 2024 – Present*
  - 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.
- **Cybernaut Edu Tech LLP** — Chennai, TN, India
  Application Developer Intern — *Feb 2020 - Aug 2020*
  - **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, HTML, XML, CSS, SQL, Kotlin
- **Certifications**: Application & Web Development, UI/UX & Graphic Design, 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

- **Dynamic Load Balancing in SDN-Based Data Center Networks** **Aug 2024 - Dec 2024**:
  - Developed a heuristic dynamic load-balancing algorithm to optimize network traffic in SDN-based data centers.
  - Improved throughput, reduced latency, and minimized packet loss by redistributing traffic flows dynamically.
- **Partial Scoring of SQL Queries** **Aug 2024 - Dec 2024**:
  - Developed a system to partially score SQL queries by breaking them into sections (e.g., `FROM`, `WHERE`, `GROUP BY`) and assessing their correctness.
  - Leveraged crowdsourcing for manual verification of discrepancies between instructor and student query outputs.
  - Used similarity metrics and human feedback to identify and categorize missing, extra, or partially incorrect records.
  - Improved grading accuracy and efficiency by combining automated evaluation with human intuition for ambiguous cases.
- **Artificial Intelligence Based All-in-One Personal Assistant Using Smart Mirror** **Jan 2022 - May 2022**:
  - Engineered a budget-friendly AI-powered smart mirror offering customizable features like scheduling and news updates.
  - Effectively balanced affordability with advanced functionality, enhancing user experience in consumer electronics.
- **Drowsiness Sensing System of Driver based on Behavioral Characteristics to Prevent Road Accidents Using Real-Time Optimized Computer Vision** **Jan 2023 - May 2023**:
  - 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.
  - **Link:** restpublisher.com/articlejame/10-46632-jame-2-2-4