Pranav Viswanathan

8573976310 | pranav.viswanathan11@gmail.com | Linkedin | https://pranavviswanathan.tech/

EDUCATION

Northeastern University, Khoury College of Computer Sciences Boston, MA
Master of Science in Computer Science *Sept. 2024 – Dec. 2026*

Vellore Institute of Technology Chennai, TN
B.Tech In CSE with a Specilisation in Cyber-Physical Systems *Sept. 2020 to May 2024*

EXPERIENCE

Project Intern May 2023 – Feb. 2024
NergyLive *Kerala, India*

- Developed an anomaly detection system for HVAC systems, enabling early identification of issues and enhancing overall system performance and reliability.
- Revamped website design to optimize user experience, resulting in improved navigation, engagement, and accessibility.
- Integrated data visualization tools to provide actionable insights from real-time system monitoring aiding in proactive decision-making and maintenance.

Research Intern Sep. 2018 – Present
National Institute of Technology, Tiruchirappalli *Tiruchirappalli,India*

- Designed a machine learning model to detect and mitigate DDoS attacks on cloud networks.
- Enhanced network security by implementing real-time threat detection and response mechanisms.
- Collaborated with a cross-functional team to optimize model performance and reduce false positives.

PROJECTS

Project Asclepius | *Java, MySQL, REST API, Docker* January 2023 – March 2023

- Engineered a robust centralized medical database system to unify patient medical histories across multiple hospitals, ensuring seamless access to critical information for first responders and emergency departments
- Deployed a proactive allergy alert system to mitigate risks during emergency care, significantly enhancing patient safety and treatment outcomes
- Optimized healthcare data management processes, enabling precise diagnosis and personalized treatment plans through comprehensive and integrated patient records

PranavaOku | *Python, Flask, PostgreSQL, Docker* June 2022 – October 2022

- Developed PranavaOku, a cloud provisioning system that dynamically allocates virtual machines and hosts static websites, reducing manual server management time by 40%
- Implemented automated VM deployment and scaling, resulting in a 30% improvement in resource utilization efficiency
- Empowered users with a flexible platform for deploying and managing over 100 web applications, significantly enhancing cloud infrastructure capabilities

Speranza Cieca | *Arduino, Sensors, C++* March 2021 – June 2021

- Developed a wearable assistive device aimed at reducing road accidents for visually impaired individuals by utilizing real-time environmental data and alert mechanisms
- Enhanced daily living capabilities for the visually impaired by providing functionalities that support safe navigation and productivity
- Conducted in-depth research on assistive technologies to design a solution tailored to the needs of India's visually impaired population, the largest in the world

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI, Spring Boot
Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, AWS, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, Matplotlib
Other Skills: RESTful APIs, Celery, Redis, OAuth, Database Integration, Machine Learning (scikit-learn), Data Visualization