Aparna Venkatesh

avenkatesh@umass.edu | 413-(315)-1460 | github.com/avenkatesh2507 |
www.linkedin.com/in/aparnavenkatesh07

Education

University of Massachusetts Amherst
Bachelor of Science in Computer Science *Expected Graduation: Spring 2029*
GPA: 4.0 / 4.0
GEMS Millennium School, Sharjah *Graduated: May 2025*

Experience

Organizer, TEDxYouth Event *Oct 2024 – Feb 2025*
- Coordinated logistics and speaker communication for a TEDxYouth event featuring 11 speakers across diverse disciplines.
- Collaborated with a 6-member team to manage scheduling, rehearsals, and event-day execution under strict deadlines.

SQL Intern (Shadow Internship) *May 2024 – Aug 2024*
HawksCode & EasyShiksha
- Analyzed Oracle PL/SQL workflows to understand query optimization, indexing strategies, and performance tuning techniques.
- Evaluated database schemas and execution plans to identify efficiency improvements in production environments.

Projects

SenseAI — HackPrinceton
- Built a B2B SaaS platform for customer service that analyzes calls in real time and retrospectively, generates actionable insights, provides business statistics, and supports employees with an AI chatbot for performance guidance and policy questions.
- Integrated **OpenAI API** to process power the chatbot and **Gemini API** for **sentiment analysis**
- Designed RESTful backend endpoints for efficient API calls and data flow.

Plant-Buddy — Plant Water Reminder
- Developed a responsive web application using **HTML**, **CSS**, and **JavaScript** to help users schedule and track plant watering reminders.
- Implemented client-side logic to manage reminder states and improve usability through clean UI design.

A-EYE: Assistive Cap for the Visually Impaired
- Engineered a smart assistive device using **ultrasonic sensors** and Raspberry Pi to detect obstacles and provide real-time audio feedback.
- Integrated **Bluetooth connectivity** and **emergency calling functionality** via a prototype mobile application.

Labyrinth — RPG Game
- Developed a **Python-based** role-playing game featuring maze navigation, player progression, and decision-driven gameplay mechanics.
- Applied object-oriented design principles to improve modularity and maintainability.

Pacman-Themed Personal Portfolio
- Built an interactive portfolio using HTML, CSS, and JavaScript inspired by Pacman-style mechanics.
- Applied event-driven programming and animation techniques to enhance user engagement.

Skills

Programming Languages: Python, SQL, JavaScript, HTML, CSS, JAVA
Frameworks & Tools: React, Node.js, Oracle PL/SQL, Git, MIT App Inventor, Figma, Gemini API, OpenAI API
Core Concepts: Object-Oriented Programming, Database Design, Full-Stack Development