

# Venkata Sai Akash Arvapalli

 [github.com/AVSAkash](https://github.com/AVSAkash)  [AVS-Akash.com](https://codesandbox.io/s/AVS-Akash.com)  [linkedin.com/in/avs-akash](https://linkedin.com/in/avs-akash)  [venkatasaiakash.arvapalli@gmail.com](mailto:venkatasaiakash.arvapalli@gmail.com)

## EDUCATION

**Mahindra University**

*B.Tech Computer Science*

**Impulse College (State Board)**

June 2026

*Current GPA: 8.0/10.0*

June 2022

*Percentage: 95%*

## COURSEWORK

**Courses:** Object-Oriented Programming, Data Structures & Algorithms, Operating Systems, Computer Networks, Database Management Systems, Software Engineering, Design and Analysis of Algorithms, Machine Learning, Deep neural Networks, Human Computer Interaction

**Awards:** First Place – Week 4 Mutual Program (Mahindra University): Awarded top rank for innovative solution in an entrepreneurship-based simulation program; First Place – Venture Vault by EIC (Mahindra University): Won a university-level startup pitch competition organized by the EIC.

## SKILLS

**Languages:** Python, JavaScript, HTML5, CSS3, SQL, Java, C/C++

**Frameworks & Libraries:** React.js, Node.js, Express.js, Bootstrap, Tailwind CSS, TensorFlow, PyTorch, scikit-learn, OpenCV, NumPy, pandas

**Tools & Platforms:** Git, GitHub, Figma, MongoDB, MySQL, Mongoose, EJS, PostgreSQL, Jupyter Notebook, Google Colab, REST APIs, AJAX, JSON, XML, Jira, JWT, Postman, VS Code, Vercel, Render, Netlify, CI/CD, Agile, Math-Lab

**Other Skills:** ML Integration, Model Deployment (Flask/FastAPI), Data Preprocessing, Responsive UI, JWT Authentication, NLP-powered Features, Data Visualization (Basic knowledge of Docker, Kubernetes, Jenkins)

## PROJECTS

**UniEvent** | *HTML, CSS, JavaScript, Node.js, Express, MongoDB, Mongoose*

May 2025

- Developed a full-stack event management web application for university communities, enabling users to easily create, manage, and discover campus events.
- Built a responsive frontend using HTML, CSS, and JavaScript, focused on clean UX and mobile compatibility
- Engineered a backend with Node.js and Express, integrating MongoDB for structured event data storage
- Implemented file upload functionality using **multer** and developed RESTful APIs for full CRUD operations
- Deployed the application on Render; source code available on GitHub

**Voice Q&A Assistant** | *Python, OpenAI API, PyTTS3, SpeechRecognition, Tkinter*

June 2025

- Built a desktop voice assistant that accepts spoken questions, uses a large language model to generate answers, and responds via text-to-speech
- Designed a user-friendly GUI using Tkinter to display input/output for better accessibility and UX
- Integrated speech recognition for input and **pyttsx3** for generating real-time spoken responses
- Showcased prompt engineering and API integration with OpenAI to build dynamic Q&A workflows

**Motion Tracking & Rehab Web App** | *Python, Flask, OpenCV, MediaPipe, HTML/CSS, JavaScript*

Jun. 2025

- Developed a web-based rehabilitation assistant that tracks hand movements using computer vision to assist patients with finger and wrist therapy
- Used MediaPipe to extract real-time hand landmarks and calculate motion angles during live webcam sessions
- Built a responsive web UI with HTML, CSS, and JavaScript; integrated Flask backend to serve video stream and control tracking logic
- Displayed visual feedback overlays and validated motion correctness to help guide users through specific exercises

## EXPERIENCE

**Qubit Quantum Computing Club** | *Design and Content Head*

Sept. 2023 – Present

Led the design team in creating posters/banners, social media posts, and web layouts with a focus on visual impact.