

Karthik E.M

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🌐 <https://github.com/Karthik-EM> | <https://linkedin.com/in/karthik-e-m-33449a292>

Skills

Languages: C/C++,Python,HTML,CSS,SQL

Technologies & Tools: Git, GitHub, Google Colab, Google AI Studio, VS Code, VirtualBox

Operating Systems: Windows, Linux (basic usage & CLI)

Education

Adi Shankara Institute of Engineering and Technology, Kalady

2022 - 2026

B.E. in Computer Science and Engineering

CGPA: 8.01/10

Relevant Coursework: Object Oriented Programming, Databases, Discrete Maths, Data Structures and Algorithms, Operating Systems, Computer Networks, Web Programming

Academic Projects

- **Blind Navigation using Vision-Language Models(2025):**Built an assistive tool for the visually impaired by combining object detection (DETR), monocular depth estimation (UniDepthV2), and a vision-language model (Qwen-VL) to generate spatially-aware scene descriptions. Developed an accessible web app with TTS and chat support.

Tech Stack: Python, PyTorch, Flask, OpenCV, Qwen-VL, HTML/CSS

GitHub: <https://github.com/TEAM-5-PROJECTS/Vision-assistant>

Personal Projects

- **Interactive BIOS-Themed Portfolio Website(2025):**Designed and developed a personal portfolio themed after a retro BIOS setup screen using only HTML,JavaScript and CSS. Implemented section hover animations, SVG icons, and audio effects for an immersive UI/UX experience.

Tech Stack: HTML, CSS, JavaScript

GitHub: <https://karthik-em.github.io/WEBSITE/>