

OM GIRKAR

Frontend Developer | AI & IoT Developer

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B.Tech student in Artificial Intelligence & Machine Learning who builds real-world tech by combining frontend development, AI and IoT. I build full-stack tools that use LLM APIs, speech models and ESP32 hardware, and I am looking for internships in frontend and AI development.

Education

Universal College of Engineering

Sep 2026 - Jul 2030

B.Tech in Artificial Intelligence and Machine Learning

Lords Universal College

2026

Higher Secondary Certificate (HSC), Class XII

Projects

Avaia - AI Voice Assistant & Smart Dustbin

[GitHub](#)

Python, Flask, OpenAI API, Whisper, ESP32

- Built a **voice-controlled assistant** that turns natural-language commands into actions using **Whisper speech-to-text** and OpenAI LLMs.
- Wrote a **Python Flask backend** that bridges the AI layer and an **ESP32**, sending HTTP commands to control hardware.
- Built a robotic dustbin with dual DC motors, **ultrasonic obstacle avoidance**, a servo-driven lid and IR-based return to a home position.
- Designed a web UI for real-time interaction; **presented at a Computer Science exhibition**.

SmartNoteZ - AI Study & Quiz Platform

[GitHub](#) | [Live Demo](#)

Node.js, Express, Supabase, Gemini/Groq APIs, PDF.js, Chart.js

- Built a **full-stack platform** where students upload PDF, TXT or Markdown notes and get **AI-generated timed quizzes**.
- Extracted text in the browser with **PDF.js** and sent structured prompts to **Gemini/Groq**, which return quiz questions as JSON.
- Added **Supabase authentication**, stored attempts and scores, and visualised accuracy and history with **Chart.js**.
- Kept it **free-tier friendly** by capping note length, limiting quiz size and requiring login for generation.

Technical Skills

Languages: Python, JavaScript, HTML, CSS, C++ (basic)

Frontend: HTML/CSS/JavaScript, Responsive Web Design, Chart.js, PDF.js

Backend: Node.js, Express.js, Flask, REST APIs, Supabase

AI / ML: OpenAI API, Whisper (Speech-to-Text), Gemini API, Groq API, LLM Integration

Hardware / IoT: ESP32, ESP8266, Arduino, Sensors & Actuators, Motor Drivers

Tools & Hosting: Git, GitHub, Vercel, WordPress, cPanel, WHMCS

Certifications

Datacom - Introduction to Cloud Job Simulation (Forage)

Jul 2026

Credential ID: uwrtsasgZ5vA6vpH9 | Skills: Git, GitHub

Achievements

- **Computer Science Exhibition:** Presented Avaia, an AI voice assistant controlling IoT hardware.