# **Kavish Shah**

Mumbai, MH, India kavish17shah2509@gmail.com +918850815715 DOB: 25 September 2005 https://github.com/dranzer-17 https://www.linkedin.com/in/kavish-shah-937590281/ **EDUCATION** B.Tech. (Artificial Intelligence & Data Science) - TY 2024 SVKM's Dwarkadas J. Sanghvi College of Engineering | Mumbai, MH **Latest Sem-3** : SGPA - 8.76 **Higher Secondary Certificate** Nirmala College of commerce and science | Mumbai, MH 2023 **Secondary School Certificate** St. Johns Universal School | Mumbai, MH 2021 Experience Research Engineering Intern(LLM) at SimPPL | LLM, Development, ML, NLP April 2024 - Present Currently developing a social media analyser platform and deploying via AWS Research Mentor in DJS INFOMATRIX August 2025 - Present DJ Sanghvi College of engineering Mumbai, MH Web Developer at NSDC & Nova committee August 2024 - 2025 DJ Sanghvi College of engineering | Mumbai, MH August 2024 - 2025 Publicity Co-committee member in S4DS

## **PROJECTS**

SignSpeak: AI-Powered Sign Language Translator Agent - Computer Vision | AI Agents | TensorFlow | Next.js

Developed an AI agent-based translator that converts sign language gestures into text and speech in real time.

Implemented gesture recognition using MediaPipe + CNN/LSTM models trained on public sign language datasets.

Designed a multi-agent pipeline:

Vision Agent → detects hand/keypoint movements.

Translation Agent → maps gestures to words/sentences.

Speech Agent  $\rightarrow$  converts translated text into natural voice.

DJ Sanghvi College of engineering Mumbai, MH

Built a Next.js interface where users can communicate with non-signers via webcam input and real-time AI translation.

 $Integrated \ reverse \ mode \rightarrow users \ can \ speak/type \ text \ and \ the \ system \ generates \ 3D \ animated \ sign \ language \ avatars \ for \ the \ deaf/hard-of-hearing \ community \ animated \ sign \ language \ avatars \ for \ the \ deaf/hard-of-hearing \ community \ animated \ sign \ language \ avatars \ for \ the \ deaf/hard-of-hearing \ community \ animated \ sign \ language \ avatars \ for \ the \ deaf/hard-of-hearing \ community \ animated \ sign \ language \ avatars \ for \ the \ deaf/hard-of-hearing \ community \ avatars \ av$ 

### **LLM Context Preserver -** Browser Extension | Google Docs API | JavaScript | AI Agents

Developed a browser extension that automatically saves LLM chats (e.g., ChatGPT sessions) into structured Google Docs using the Google Docs API.

Implemented a context injection feature, allowing users to reuse past conversations by pasting them into a new chat session, effectively preserving memory across separate interactions. Added intelligent indexing with metadata (date, topic, model used) for quick retrieval of past sessions.

Enabled seamless workflow where AI Agents can pick up old conversations, continue reasoning, and generate new outputs with context continuity.

This Solves the common issue of "LLM context loss," providing users with a personal knowledge memory layer across multiple chat sessions.

#### Vertical & Horizontal Agent Framework | AI Agents | LangGraph | MCP | Next.js | FastAPI

Built an AI agent framework supporting both vertical (domain-specialist) and horizontal (generalist/orchestrator) agents.

Vertical Agents: Specialized in tasks like financial data analysis, medical question answering, or legal compliance research — each optimized with RAG + domain-specific embeddings.

Horizontal Agent: Acts as an orchestrator, delegating queries to the right vertical agent, aggregating results, and generating unified actionable outputs.

Implemented agent collaboration protocols using MCP for memory sharing and LangGraph for agent coordination.

Built a Next.js dashboard to visualize the agent routing pipeline, showing how queries flow between horizontal and vertical agents.

#### **SKILLS**

Technical Skills: Python, JavaScript, TypeScript, React, Next.js, FastAPI, Node, Docker, AWS, Azure, PostGRE,

HuggingFace, LangChain, Langflow, RAG, MCP, AI Agents, LLMs, Weaviate, FAISS, MongoDB, n8n, Zapier,

Pipedream, , CI/CD, Git, Figma, MediaPipe

Soft Skills: Communication, Teamwork, Time Management, Team Management, Leadership, Punctuality, Discipline

Languages: English, Hindi, Gujarati, Marathi