Makarand Gokhale

Bengaluru, India | ✉ makarand0211@gmail.com | 📞 (+91) 9901252324

🔗 LinkedIn: Makarand-Gokhale0211 | GitHub: github.com/Saberzerker

⚗ Deep Learning Technologist | Applied AI | Intelligent System Design

SUMMARY

Deep Learning Technologist focused on Applied Deep Learning and Intelligent System Design. Specializes in building intelligent, multimodal AI systems that learn, adapt and interact in real-time. Past work includes building a vector database platform, fine-tuning LLMs for domain-specific interaction, developing gesture and vision-based intelligent agents, and publishing peer-reviewed research in Computer Vision.

PROJECTS AND RESEARCH

♟ Unity AI Interaction Assistant (Voice-Enabled LLM Assistant for Unity Game Development)

Built a voice-enabled LLM assistant using LangChain and Google GenAI APIs to generate Unity game scripts from natural language. Designed a speech-to-code pipeline for agent modeling and rapid prototyping using project context and prompt engineering.

😀 Group Sentiment Analysis (Mob Emotion AI)

Developed a ViT-based pipeline with DeepFace to detect and visualize group-level emotion from images. Designed an interactive sentiment visualization tool for crowd behavior analysis in social robotics and ambient intelligence systems.

🧠 Next Sequence Prediction Model (Custom Tokenizer)

Designed a custom tokenizer combining subword segmentation with sequence prediction for adaptive token learning. Integrated with pretraining workflows to improve vocabulary efficiency in domain-specific or low-resource language models.

🚀 QB-1 (Startup Prototype)

Led a 6-member team to build and pitch a medical dispensary automation solution. Won Best Startup, Best Prototype, and BMC awards at PES CIE. Built business models, product logic, and technical workflows from ideation to demo. Demonstrated ability to merge technical leadership with entrepreneurial execution.

EXPERIENCE

Sound Engineer

Vanadootha Pvt. Ltd.   **February 2024 - May 2024, Bengaluru, Karnataka**

- Developed and tested real-time audio optimization solutions; reverse-engineered legacy hardware for performance enhancement.
- Collaborated cross-functionally to translate system insights into redesigned product features.

Technical Analyst – Computer Vision Research

Centre of Innovation and Excellence, PES University   **January 2024 - April 2024, Bengaluru, Karnataka**

- Authored and presented a peer-reviewed paper on CV applications at the PAML Workshop.
- Produced a comprehensive CV report, contributing to institutional research in applied machine learning.

TECHNICAL SKILLS

Languages & Frameworks:	Python, PyTorch, JavaScript, C, TensorFlow, OpenCV, HuggingFace, LangChain, Flask, Node.js, MERN Stack, Librosa, HTML/CSS, Flutter
AI / ML Concepts:	Multimodal Learning, Vision Transformers, Sequence Modelling, LoRA, CNNs, Generative AI, GANs, RAGs, Transformers
Systems & Tools:	Git, Firebase, MongoDB, Google GenAI, OpenAI, Docker
Soft Skills:	Public Speaking, Project Management, Technical Writing, Team Leadership, Design Thinking

EDUCATION

Bachelor of Technology

4th Year Computer Science and Engineering Student, PES University, Bengaluru, Karnataka
B.Tech in Computer Science – Expected Aug 2026
CGPA: 8.26 / 10

Head of Music Club of PES.
Core Cultural Lead of Aatmatrisha – 2025
MRD and Distinction Scholarship Awardee.
Awarded Best Startup by the PES University Center of Innovation and Excellence.
Cognitech - 2025 (Behavior and Psychology Based Hackathon) - Best Performer