

MADHAV KUMAR

Software Developer | AI Engineer

@madhav.mknc@gmail.com +91 81691 01348 madhav-mknc.github.io madhav-iitd



PROJECTS

Miles AI: WhatsApp Co-pilot Aug 2024

- Launched a Relationship Management (RM) platform using **NLP models**, and **LangChain** to analyze and generate context-aware replies and automate WhatsApp interactions.
- Grew to **200+ active users** organically, driving viral engagement.

AI Chatbot Jul 2023

- Designed a production-grade **Retrieval-Augmented Generation (RAG)** pipeline for private dataset queries.
- Reduced hallucinations by 60% through fine-tuned embeddings.

X-Tweet: Twitter Co-pilot Nov 2023

- Created a **Telegram bot** using **GPT-4-Turbo** for personalized social media content creation, scheduling, and analytics.
- Fine-tuned LLMs on domain-specific datasets, increasing engagement metrics by 25%.

Medcare: AI Medical Assistant Jun 2024

- Automated EMR-ready clinical documentation, reducing physician note-taking time by 90%.
- AI-driven follow-up workflows raised patient recall by 20%.

Who-Is-Online Jan 2024

- Published a **Chrome extension** with **JavaScript** and **WebSockets** turning each webpage into a real-time chatroom.

PNP_Agent: Prediction Markets X Bot Jun 2025

- Launched an AI-powered market analysis bot for X/Twitter that aggregates prediction market data, generates forecasts, and delivers real-time insights with AI-generated news and visuals.

WORK EXPERIENCE

AI Engineer Hashed Ventures, Seoul, South Korea

- May 2023 - Aug 2023
- Built a secure, on-prem Slack-based assistant for document Q&A on private company datasets, processing up to 100k+ documents with Chroma DB for real-time data retrieval ^[1].

AI Engineer Lawrence, Switzerland (LegalTech Startup)

- Nov 2023 - Feb 2024
- Engineered a legal memo tool with LLM-based retrieval of Swiss laws, articles, and case precedents; iteratively optimized prompts and model parameters to ensure high legal accuracy ^[1] ^[2].

Software Developer PNP Exchange

- Jun 2025 - Present
- Deployed **PNP_Agent** to transform prediction market data into categorized AI-generated news and visuals; implemented scalable ETL pipelines using Supabase and microservices, scaling to process 500K+ market events daily. ^[1] ^[2].

PERSONAL RESEARCH

Researcher Indie Project - AEI

- Dec 2024 - Present
- Researching **Artificial Emotional Intelligence (AEI)** and **Artificial Consciousness**; designing modular **cognitive architectures** for adaptive autonomous agents ^[1].

EDUCATION

Bachelor of Technology

- Engineering Physics (Major)
Computer Science and Engineering (Minor)
Indian Institute of Technology Delhi
2024 New Delhi, Delhi

TECHNICAL SKILLS

- Programming:**
Python TypeScript JavaScript Java
C/C++ Shell Golang SQL Git
AWS (Bedrock, S3, EC2, RDS, Lambda)
GCP Docker Kubernetes Azure
- Infosec:**
Wireshark Burp Suite Metasploit Hashcat
- ML & AI:**
Llama Index LangChain DSPy Chroma
Hugging Face CrewAI Autogen Eliza OS
Pydantic AI MemO ACE Framework
-
- DSA Web Development Automation
Computer Networking CTF Generative AI
Web Scraping CLI Development OOPS

ACHIEVEMENTS

- Start-up Mentor in **Samsung R&D SFT**; team placed in **Top 10 finalists**.
- 4-Star on CodeChef; Rating 1800+.
- Pupil on **Codeforces**; Rating 1300+.
- 5-Star in C++, Python, Java, Problem Solving on **HackerRank**.
- Cleared JEE Mains and Advanced.
- Top 10% Developers on **GitHub**.
- Top 1% Hackers on **TryHackMe**.