

MADHAV KUMAR

Software Developer | AI Engineer

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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**.