MADHAV KUMAR

Software Developer | Al Engineer

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in madhav-iitd





PROJECTS

Miles AI: WhatsApp Co-pilot

August 2024

- Developed a **PRM** system to impersonate users and reply on their behalf, enhancing conversation dynamics.
- Quickly gained popularity across the IITD campus and gathered over 100 users from multiple countries within a month.

Al Chatbot July 2023

 Built a chatbot with LangChain + Pinecone for context-aware custom data chat; production-ready RAG pipeline.

X-Tweet: Twitter Co-pilot

November 2023

- Deployed a **Telegram bot** for personalized content generation.
- Used it to manage and enhance the user's X/Twitter presence.
- Finetuned GPT 3.5 for best quality content generation.

Medcare: Al Medical Assistant

June 2024

- Automated clinical note-taking using AI for EMR-ready outputs.
- Built personalized patient follow-up system; Reduced burnout by streamlining healthcare workflows with GenAI.

Who-Is-Online

January 2024

- Chrome extension showing real-time users on any webpage.
- Enabled instant chatrooms for global user interaction.

PNP_Agent: Prediction Markets X Bot June 2025

 Built an X/Twitter bot that posts insights from prediction market data; Handles real-time user mentions and queries; delivers market summaries and tailored trading recommendations.

WORK EXPERIENCE

Al Engineer

Hashed Ventures, Seoul, South Korea

May 2023 - Aug 2023

Developed an internal Slack-based assistant enabling secure document chat and analysis on private company data; Implemented RAG using LangChain and Chroma database [1].

Al Engineer Lawrence, Switzerland (LegalTech Startup)

Nov 2023 - Feb 2024

 Developed a legal memo tool using LLMs to retrieve relevant Swiss laws, articles, and case precedents from legal statements; Iterated on models and prompts with rigorous evaluation to ensure legal relevance and accuracy [1] [2].

Software Developer

PNP Exchange

Jun 2025 - Present

• Deployed **PNP_Agent**; Built a system to transform speculative market data into categorized, Al-generated news headlines with visual content; Designed scalable pipelines for ingesting, processing, and storing daily market signals on **Supabase** [1] [2].

PERSONAL RESEARCH

Researcher

Indie Project - AEI

Dec 2024 - Present

Researching Artificial Emotional Intelligence (AEI) and Artificial Consciousness;
 Exploring various cognitive architectures and building a foundational architecture for autonomous behavior [1].

EDUCATION

Bachelor of Technology

Major in Engineering Physics
Minor in Computer Science and Engineering

Indian Institute of Technology Delhi

□ 2024

New Delhi, Delhi

TECHNICAL SKILLS

Programming:

Python TS/JS Java C/C++ Shell AWS (Bedrock, S3, SageMaker, EC2) Azure GCP Git Docker Kubernetes SQL

Infosec:

Wireshark Burpsuit Metasploit Hashcat

ML & AI:

Llama Index Langchain DSPy Chroma Huggingface CrewAl Autogen Eliza OS Pydantic Al MemO ACE Framework

Object-Oriented Programming System
DSA Web Dev Automation
Computer Networking Capture the Flags
Generative Al Web Scraping CLI Dev

ACHIEVEMENTS

- Start-up Mentor in Samsung R&D SFT program; team qualified as Top 10 finalists
- 4-Star rated on Codechef; Rating 1800+
- Pupil rated on Codeforces; Rating 1300+
- 5-Star rated in C++, Python, Java, and Problem Solving on **HackerRank**
- Cleared JEE Mains and JEE Advanced
- Under top 10% Developers on Github
- Under top 1% Hackers on TryHackMe