

## **Aayushmaan Hooda – Professional & Personal Profile**

Aayushmaan Hooda is a backend and Generative AI engineer, having recently completed a Master's in Information Technology at the University of New South Wales (UNSW), Sydney (Sept 2023 – Sept 2025). With a strong foundation in backend development and a growing focus on AI/ML, Aayushmaan blends technical skills, sports achievements, and an entrepreneurial mindset. His journey reflects continuous learning and dedication to applying technology in impactful ways.

### **Identity**

Born on 30th August 1999 in Rohtak, Haryana, India, Aayushmaan was named by his bua (Kavita) and mother. He is also affectionately called "Pallove." Beyond his technical journey, his disciplined background in sports and early education has shaped his problem-solving and teamwork mindset.

### **Family**

Aayushmaan comes from a close-knit and supportive family: - Father: Virender Hooda (born 1973) - Mother: Sunita Hooda - Younger Brother: Prajash Hooda (born 2003) Beyond his immediate family, Aayushmaan deeply values certain people in his life, whom he fondly refers to as his "favourite humans": - Shruti Hooda: His chachi (aunt) who lives in the USA and holds a special place in his heart. Kavya Mohan: His favourite friend, a constant source of encouragement and joy.

### **Education**

University of New South Wales (Sydney, Australia): Master's in Information Technology (Sept 2023 – Sept 2025, 73%).

Maharshi Dayanand University (Rohtak, India): Bachelor of Computer Science and Engineering (2017 – 2021), 67%.

Silver Oak School (Rohtak, India): Senior Secondary (Grade 12), 75%.

Durga Public School (Solan, India): Boarding school; switched from cricket to table tennis in Grade 7. Played nationals in Grade 10, 3rd rank in CBSE Cluster, District Champion.

Scholars Rosary (Rohtak, India): Primary schooling till Class 3.

## Professional Experience

**Associate Software Engineer** – Annalect India (Oct 2021 – Sept 2023, Gurugram, India): Contributed to backend microservices, authored and maintained YAML files for OpenAPI specifications, developed APIs in Flask, and delivered demos to international teams.

**Backend Developer Intern** – Stoik (Jan 2025, Sydney, Australia): Gained hands-on expertise with Docker architecture and FastAPI orchestration. Worked on MongoDB schemas and improved backend application functionality.

## Key Projects

- **LangGraph ChatbotApp:** Built a chatbot with LangGraph and LangChain, Streamlit frontend, and session-state management.
- **RAG PDF Summarizer:** Developed a Dockerized app to query PDFs using embeddings and FAISS for retrieval.
- **Leave Manager MCP Server:** Designed a leave management system using FastMCP and MongoDB with REST-style tools.
- **Sydney Property Sales Predictor:** Built an ML pipeline (XGBoost, scikit-learn) for property price prediction.
- **Travel History RESTful API:** Created Flask-RESTX service to visualize visited countries with Matplotlib & GraphQL API integration.

**Resume Selector Agent** Developed a multi-agent AI system using the crewAI framework to orchestrate automated resume selection.

**RAG Evaluation using RAGAS** Developed a full-pipeline evaluation framework for retrieval-augmented generation (RAG) systems using LangChain, Pinecone, and RAGAS metrics.

## Skills and Technical Proficiencies

Languages: Python, JavaScript, Shell Scripting, SQL, NoSQL

Frameworks: React, Flask, FastAPI, Nginx, Streamlit, LangChain, LangGraph, CrewAI

Libraries: FastMCP, Numpy, Pandas, Pydantic, Scikit-learn, Matplotlib, boto3, Pytorch

AWS Cloud: API Gateway, SageMaker, Bedrock, S3, Lambda, PartyRock

Tools: Docker, Git, Jira, Postman, PostgreSQL, MongoDB, Pinecone, LangSmith, Figma, Flowise, Vapi

Concepts: Multi-Agent Systems, Transformers, Deep Agents, Fine Tuning, Context/Prompt Engineering, RAG, MCP, VectorStore, UI/UX Principles, GitHub Actions.

## Certifications

- AWS Certified Cloud Practitioner (AWS)
- Deep Agents with LangGraph (LangChain Academy)
- Python Development (Udemy)
- Flask Development (Udemy)
- FastAPI Development (Udemy)

## Sports Achievements

Aayushmaan has a strong sporting background in table tennis. He was the Solan District #1 champion (2016), secured 3rd place in CBSE Cluster, and represented at the national level twice. His early discipline in sports continues to fuel his resilience, teamwork, and strategic thinking in his professional journey.

## Professional Summary

Backend and Generative AI engineer with hands-on experience in building APIs, orchestrating microservices, and deploying AI-powered applications. Skilled in Python-based frameworks, cloud services, and modern AI/ML workflows. Completed a Master's in IT at UNSW Sydney (Sept 2025), with previous industry experience at Annalect India and Stoik. Passionate about designing scalable systems, integrating AI into real-world use cases, and continuously upskilling in cutting-edge technologies

## Interests & Personal Passions

Formula 1 enthusiast – supports Red Bull Racing and Max Verstappen; also follows Kimi Antonelli (Mercedes)

Cricket lover – passionate RCB supporter and long-time Virat Kohli fan

Movies & Series – enjoys Harry Potter, Star Wars, and Vikings

Deep interest in emerging AI trends, especially multi-agent architectures and memory-driven systems