Mokesh Nagpal

Aspiring Data Scientist

♥ Howrah, West Bengal
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Summary

Fluent coder and curious learner with a strong desire to broaden skills beyond an academic foundation, coupled with confidence in communication and leadership potential.

Education

Degree	Institute	CGPA (10)	Year
Master of Computer Applications	Birla Institute of Technology, Mesra	8.97	Aug 2024-Present
Bachelor of Computer Applications	Lovely Professional University, Phagwara	9.43	Aug 2021-Jul 2024

Skills

Power Skills

- Critical Thinking
- Leadership & Teamwork
- Public Speaking
- Problem Solving
- Rational Thinking
- Generalization & Modularity

Technical Skills

- Languages: Python, R, C, C++, Micro-Python
- Web Development: HTML5, CSS3, Flask, PHP, JavaScript
- Frameworks & Tools: Tkinter, LangChain, HuggingFace, RAG
- Databases: MySQL, Firestore
- AI/ML: Machine Learning, Deep Learning, NLP
- Core CS: Data Structures & Algorithms

Internship Experience

■ **Data Science Intern, Ernst & Young (EY):** May 2025–Jul 2025. Progressed from foundational to advanced projects in NLP and generative AI, building 5+ applications involving text classification, prompt engineering, and model finetuning, optimizing inference latency by 85%, and streamlining workflows through automated pipeline design.

Research & Patents

- Nagpal, M., & Kaur, R. (2025): An IoT and Cloud Computing-Based Traffic Management System. Accepted for presentation at the AISTS 2025 Conference, Marwadi University. (To appear in IEEE Xplore).
- Nagpal, M., & Kaur, R. (2025): A Real-Time Vehicle Detection-Based IoT Impelled Traffic Management System. Accepted for publication in *Quantum-Enhanced IoT: The Future of Smart and Sustainable Urban Spaces*, Bentham Science Publishers.
- Smart Pillow (Pat. No. 202311080891; Dec 2023): IoT/ML pillow that auto-adjusts to user posture.

Projects

- ResumeRecon (Jul 2025): Engineered an intelligent CV matcher using LangChain, HuggingFace, FAISS, Streamlit, supporting bulk uploads, role-specific filtering, and USP extraction.
- YouTube Doubt Solver (Jun 2025): Built a question-answering app using Streamlit, LangChain, HuggingFace, with multilingual transcript translation and RAG-based retrieval.
- Indus Valley Script Analysis (Mar 2025): Performed segmentation and directional pattern analysis on ancient seals using deep learning for historical inference.
- SoilMoisture AI (Sep 2024): Developed a real-time sensor-based app using Flask, ML models, and NPK+ moisture sensors.
- Hard-Coded MLP (Aug 2024): Implemented a multi-layer perceptron from scratch to understand neural network mechanics.
- Climate Change Analysis (Apr 2024): Analyzed global climate data using R, ARIMA, and visualized forecasting trends.
- E-commerce Website (Dec 2022): Created a dynamic PHP/MySQL web app for LPU merchandise sales.
- C Tic-Tac-Toe Game (Aug 2022): Designed a GUI-based C game with single and multiplayer logic.

Certifications

- Data Analysis with Python (IBM; Dec 2024)
- Hands-on ML with Python (HRDC LPU; Dec 2023)
- Data Structures (GeeksforGeeks; Sep 2023)
- Data Visualization with Tableau (CPE-LPU; Aug 2023)

Achievements

- Winner, Data Science Hackathon (DSS, BIT Mesra; Sep 2024): 24-hour Data Science competition.
- 1st Position, War of Words (LPU; Sep 2023): Debating & teamwork competition.

Volunteer Experience

- Placement Coordinator, BIT Mesra: Organized drives and secured student opportunities.
- Vice President, Hostel 4, LPU: Directed welfare efforts and organized events.
- Class Representative, LPU: Served as class–faculty liaison.
- **SSB Interviewee:** Shortlisted for leadership assessment.

Co-curricular Activities

Winner, INCREDIBLE-8 (LPU; Apr 2022): Led sustainability challenge initiative.