ARBASH HUSSAIN

GitHub | Portfolio | LinkedIn | Hashnode

SKILLS

- **Programming:** Python, Java, JavaScript, Dart, Data Structures & Algorithms (250 problems solved on Leetcode)
- **Frameworks:** React, Next.js, Flutter, Django, FastAPI, Flask, PyTorch, TensorFlow, LangChain, Scikit-learn, Selenium
- **Tools:** MySQL, MongoDB, Appwrite, Firebase, Docker/Kubernetes, CI/CD, Git/GitHub, AWS
- **Others:** Linux, Postman, VS Code, Jupyter, Canva, Figma, Excalidraw, Notion, Prompt Engineering

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EDUCATION

- Jaypee Institute of Information Technology, Noida *(Btech in Computer Science Engineering)* *2020 - 2024*

- Mayoor School, Noida *(12th CBSE Boards - 89%)* *2006 - 2020*

WORK EXPERIENCE

Data science Intern | Physics Wallah *Aug 2024 - Nov 2024*
- Designed an end-to-end **AutoML workflow** for non-technical users to train classification/regression models.
- Built pipeline using **Python**, **Scikit-learn**, **MLFlow**, and **Flask** with customizable upload + config options.
- Simplified ML lifecycle: ingestion → transformation → training → evaluation — all through a user-friendly interface.

Research Trainee | Jaypee Institute of Information Technology *June 2023 - Aug 2023*
- Conducted performance analysis of **Python** vs **Mojo** on recursive algorithms and Sudoku solvers.
- Documented strengths/limitations of Mojo for high-performance Python alternatives.

PERSONAL PROJECTS

CS-SPRINT ⎪ *React, Appwrite, Tailwind CSS, Excalidraw* *Website*
- Built a distraction-free platform for structured CS notes, cheatsheets, and interview prep.
- Integrated visual aids, dynamic routing, table of contents, and client-side caching for faster access.
- Delivered a frictionless experience with no logins or ads, focusing solely on quality CS learning content.

Research Assistant ⎪ *Python, CustomTkinter, LangChain* *Demo* | *Code*
- Inspired by personal need during B.Tech project work to manage and interact with research papers efficiently.
- Integrated PDF summarization and LLM chat (ChatGPT, Gemini) to enable interactive research insights.
- Implemented local file tagging and a polished GUI to streamline research workflows and document management.

Recommendation System ⎪ *Python, Django, AWS, HTML, CSS, JS* *Demo* | *Code*
- Built a unified recommender for 5,000+ movies, 114k songs, and 271k books with personalized user suggestions.
- Used **collaborative filtering** and **content-based algorithms** for **personalized recommendations**.
- Optimized song recommendations, cutting execution time and memory usage for better scalability.

Algorithm Visualizer ⎪ *Python, Pygame* *Demo* | *Code*
- **Created interactive visualizations** for **8 sorting** and **8 search algorithms** using **Pygame**.
- Leveraged interactive visual feedback to improve understanding and retention of core DSA concepts.

ADDITIONAL INFORMATION

Certifications:
- Data Science Masters - *Physics Wallah*
- The Complete 2023 Web Development Bootcamp - *Udemy*
- The Complete Flutter Development Bootcamp with Dart - *Udemy*

Achievements:
- Cleared GATE 2025 (Data Science & AI) with qualifying score
- 5 Star Python coder at HackerRank.
- Featured Article: KNN in Machine Learning