

Aryaan Bazaz

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Roll No.2022108 | DOB: 6 July, 2004

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Github | in Linkedin |



CGPA: 8.48 (Till 5th semester)

Percentage: 96.4%

Percentage: 92.2%

Education

Indraprastha Institute of Information Technology, Delhi

B.Tech (Computer Science and Social Sciences)

2022 - 2026

Prudence School, Dwarka, New Delhi

CBSE, Standard 12, PCM+CS

2020 - 2022

Presidium School, Dwarka, New Delhi

CBSE, Standard 10

2019 - 2020

Skills

Data Structures and Algorithms, Econometrics, Data Base Management System, Object Expertise Area:

Oriented Programming(OOPs), Operating Systems, Machine Learning.

Programming

Languages:

Python, C, JAVA, C++

Tools and GitHub, GIT, Linux, VS Code, Miro, MySQL, VM VirtualBox, Matplotlib, LATEX,

Technologies: IntelliJ IDEA, JavaFX, Google Collab, Maven, Pandas, Canva

Technical Electives: Analysis and Designing of Algorithm(ADA), Advanced Programming, Operating Sys-

tems, Data Structures and Algorithms, Human-computer Interaction, Computer Orga-

nization, Introduction to Programming, Object Oriented Programming(OOPs).

Work Experience

Machine Learning Intern

Company: Texas Distribution Co.

Worked at Texas Distribution Co. where I utilized ML techniques to predict material waste based on historical data, optimizing the material ordering process, which led to a 12% reduction in material costs and waste.

• Applied Classification Algorithms (Random Forest, SVM): Implemented classification models to classify waste-prone construction processes, achieving an accuracy of 83%, resulting in the identification of high-risk areas for material waste reduction.

Researcher At Knowledgeable Computing and Reasoning Lab

Guide: Dr.V.Raghava Mutharaju

Scraped and processed over 6,000 legal cases, identifying key features such as agents, ethical principles, and consequences, creating a structured dataset for cross-jurisdictional legal analysis

• Model Development and Optimization: Applied advanced LLMs (e.g., GPT-4 and Meta-Llama) with enhanced prompt engineering to achieve high-accuracy extraction of 11+ legal and ethical features per case, reducing hallucination rates by optimizing input packet sizes.

Research Assistant at IIIT Delhi

Guide: Dr. Dhruv Kumar

Created an LLM based Vivabot that can help in analysing the assignments and ask relevant questions. Automated the Viva process, reducing the human effort by 50-60%. Reduced the bias and increased accuracy by 60~% . (May, 24 - June, 24)

Projects

Payment Fraud Detection System (Machine Learning):

Team Size-4 (Oct, 24 - Dec, 24)

- Designed and executed a machine learning model using Python and scikit-learn to predict heart disease risk with an accuracy of 98%, enabling early intervention and improving patient outcomes.
- Implemented advanced data preprocessing techniques: Applied robust data preprocessing methods to enhance model performance and accuracy in predicting heart disease risk.

Tech Stack: Python, Jyupter Notebooks, ML Algorithms . Repository here.

Fortress Legends (Desktop Game):

Team Size-2 (Nov, 23 - Dec, 23)

- Designed a desktop game inspired by Stick Hero using Java and JavaFX, integrating graphics, animations, and game logic.
- Implemented all core OOP concepts, including inheritance, polymorphism, abstraction, and encapsulation, for a modular and maintainable game architecture.

Tech Stack: Java, JavaFx. Repository here.

Memory Management System: Operating Systems Project

Team Size-2 (Nov, 23 - Dec, 23)

- Developed custom memory management system using mmap and munmap system calls in C
- Achieved efficient memory allocation in page size multiples, utilizing a doubly linked list free list structure. Implemented key functions for allocation and deallocation.

Tech Stack: C. Repository here.

FLASH: Online Retail Store (Database Management System)

Team Size-4 (Feb, 24 - April, 24)

• This is a CLI based online retail store wherein we have deployed the concepts of DBMS and SQL.Incorporated triggers for automatic inventory updates, stored procedures for complex queries, and views for data presentation, achieving 45% faster query execution as compared to the baseline time.

Tech Stack: SQL, Python. Repository here.

Positions of Responsibility

- Core Team Member of Machaan(Theatre Club) @ IIIT Delhi
- Head Boy @ Prudence School
- Esya(Tech Fest) Lead Organising Committee @ IIIT Delhi

Recommendations and Awards

- Recieved Letter of Recommendation from Dr. Dhruv Kumar for doing exceptional work under his guidance on the project "Building LLM based Viva Bot" here.
- Chemistry Topper @ Prudence School(Standard 12)
- Recieved Overall Academic Excellence Awards consecutivally for 6 years (standard 7 12)
- Gold medalist at Open International TaekwonDo Championship

Declaration: The above information is correct to the best of my knowledge.

Aryaan Bazaz

Date: March 11, 2025