

Yusra Faisal

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EDUCATION

Habib University

Expected Graduation, 05/2027

- o **Bachelor's in Computer Science** —> **Interest:** Machine Learning and Artificial Intelligence
- o **GPA:** 3.70/4.00
- o **Related Coursework:** Programming Fundamentals, Data Structures & Algorithms, Object Oriented Programming, Database Systems, Calculus 1&2, Discrete Mathematics, Probability & Statistics, Linear Algebra, Engineering Math

Cedar College (A Levels) —> **Grades:** 2A* 1A

08/2021 to 07/2022

Generation's School (O Levels) —> **Grades:** 7A* 3A

08/2008 to 07/2021

EXPERIENCE

Data Analysis & Research Intern - Office of Institutional Research at Habib University:

12/2024 to present

- Collaborating on a 5-6 month research project to refine course design and performance evaluation by analyzing student performance, course curriculums, and instructor effectiveness.
- Analyzing data from 200+ courses, 450+ faculty members and 1,200+ students using Python (NumPy, Pandas, TextBlob), SQL, Excel, and Power BI to identify trends and gaps in learning outcomes.
- Developing interactive dashboards to translate complex data into actionable recommendations for curriculum enhancement and faculty engagement.

Software Engineering Fellow - Headstarter AI:

07/2024 to 09/2024

- Built 5+ AI-powered applications and APIs using Next.js, OpenAI, Pinecone, and Stripe API with 98% model accuracy.
- Led and mentored a team of 3+ fellows to develop scalable projects using MVC design patterns and Agile methodologies.
- Coached by Amazon, Bloomberg and Capital One engineers on CI/CD pipelines, Git workflows and microservice patterns.

PROJECTS

KD Tree Image Recommendation System (DSA Project) [Github Demo](#)

02/2024 to 04/2024

- Tech Stack: *Python, Tkinter, Data Structures & Algorithms, Digital Image Processing*
- Implemented a KD-tree-based image recommendation system that analyzes color similarity using hue, saturation, and value (HSV) metrics. Integrated functionalities for users to insert, delete, and retrieve similar images using nearest neighbor search and developed an interactive Tkinter-based GUI for seamless user experience.

GitBot - AI-Powered Support Chatbot: [Github Website](#)

07/2024 to 07/2024

- Tech Stack: *Next.js, Tailwind CSS, Material UI, Gemini API, GitHub API, Firebase, Git, Vercel*
- Developed and trained an AI chatbot using Retrieval-Augmented Generation to streamline support for Git and GitHub users.

EduCard - AI-Powered Flashcard Tool: [Github Website](#)

08/2024 to 08/2024

- Tech Stack: *Next.js, Tailwind CSS, Framer Motion, Firebase, Stripe API, Gemini API, Clerk*
- Created an AI-driven SaaS web app for generating personalized study flashcards with secure data storage via Firebase. Implemented an interactive UI using Tailwind CSS, and Framer Motion; integrated Gemini API for AI-powered content generation, Stripe for payment processing & Clerk for secure authentication.

KBusConnect – Public Transport Management System (Database Project) [Github Demo](#)

08/2024 to 11/2024

- Tech Stack: *MySQL, Database Design, Python, PyQt6, System Integration*
- Engineered a robust database system to optimize bus operations, supporting scheduling, route planning, and role-specific user management (Admin, Driver, Passenger). Designed and implemented a relational schema using MySQL, integrated SQL queries with a PyQt6-powered UI for seamless real-time interactions.

Fields of Fortune – Farming Simulation Game (OOP Project) [Github Demo](#)

09/2024 to 12/2024

- Tech Stack: *C++, Game Development, OOP, SFML, 2D Graphics*
- Programmed an interactive 2D farming simulation in C++, incorporating crop growth cycles, inventory management, and an in-game economy. Implemented an OOP-based architecture with structured class hierarchies and integrated SFML for rendering, animations, and seamless player interactions.

SKILLS

- **Programming Languages:** Python (Tkinter, NumPy, Pandas), JavaScript (Next.js, React.js, Node.js, Three.js), C++, HTML/CSS
- **Web Development:** Frontend & Backend Development, Responsive Design, APIs, Tailwind CSS, Material-UI, Bootstrap
- **Artificial Intelligence & Data Science:** Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), Data Analysis, Data Structures & Algorithms, Hugging Face Transformers
- **Databases & Tools:** SQL, MongoDB, Firebase, Power BI, Microsoft Excel, Database Design
- **Version Control & Collaboration:** Git, GitHub
- **Soft Skills:** Problem Solving, Collaboration, Research Skills, Analytical Skills, Critical Thinking, Leadership, Communication, Time Management, Emotional Intelligence, Project Management

CERTIFICATIONS

Python (Programming for Everybody, Data Structures) —> *Offered by University of Michigan*

07/2022 to 05/2024

Dashboarding with Excel, Personal Branding, Figma —> *Offered by Habib University*

10/2023 & 01/2024