

Nazia Hassan

Student

Bachelor of Technology

Indira Gandhi Delhi Technical University for Women, New Delhi

+91-8595789674 | Portfolio

nazia.hassan2807@gmail.com

GitHub Profile

LinkedIn Profile

EDUCATION

- **Bachelor of Technology in Computer Science and Engineering** 2026
Indira Gandhi Delhi Technical University for Women, New Delhi CGPA: 7.96
- **High School** 2022
Jai Hind Public School, New Delhi Percentage: 85.4

EXPERIENCE

- **SAG - DRDO | Certificate** May - July 2024
Research Intern
 - Worked under scientists at DRDO to develop and optimize advance machine learning models for cryptographic applications for increased efficiency and performance.
 - Built a cryptographic system using **Tensorflow** of 3 **transformer models**, Alice, Bob Eve- such that Alice and Bob can securely communicate while preventing eavesdropping by Eve.
 - Used matplotlib for data analysis and evaluation, leading to optimal results with a message size of 20.
 - Achieved 99% accurate Bob model, while significantly reducing Eve's prediction accuracy by approximately 50%.
 - **Key topics: Deep Learning, Cryptography, Machine Learning in Cryptography**

PROJECTS

- **Fin Yojak | Live | Github** July 2024
 - Designed and developed a responsive finance-tracker website with a a user-friendly interface using React and recharts. Users can add, delete, and edit entries.
 - Employed best practices including component-based architecture, state management, and effective error handling, ensuring a smooth user experience and maintainable code.
 - **Tech Stack: MongoDB, ReactJS, TypeScript, Recharts, Clerk.js**
- **English to Spanish Translator | Link** June 2024
 - Engineered a machine learning model which uses Transformer architecture to translate text from English to Spanish.
 - Implemented transformer model using PyTorch tailored to translate a sentence character-by-character.
 - Achieved BLEU score of 0.62 after training a model with dataset of 5000 sentences.
 - **Tech Stack: Python, Tensorflow**
- **Library Management System | Link** Nov 2023
 - Designed and developed an efficient library management system focusing on low-level system design.
 - Leveraged object-oriented programming (OOP) principles to encapsulate functionalities for modular and reusable codes. Created distinct classes for key entities such as books, borrowers and administration.
 - Implemented efficient file handling for cataloging books, tracking borrowers, and managing inventory.
 - **Tech Stack: C ++**

TECHNICAL SKILLS

Languages: C/C++, Python, Typescript, HTML, CSS, SQL

Frameworks & Databases: Nodejs, ReactJS, MongoDB, Recharts, Clerk.js

Machine Learning Tools: PyTroch, scikit-learn, Tensorflow, numpy, pandas, matplotlib

Core Subjects: Operating Systems, Object Oriented Programming, Software Engineering, Algorithms

Data Structure & Algorithms: Solved more than 100 questions on Leetcode. | Profile

Certifications & Training:

* Web Development and Digital Marketing Internship at Anveshan Foundation IGDTUW

* Google Cloud Career Practitioners Program (GCCP) | Certificate

Version Control: VScode, Git, Github

Soft Skills: Problem Solving, Self-learning, Adaptability, Time Management

ACHIEVEMENTS

- **Research Paper** on cryptography published in Scopus-indexed conference ICICC-2024 Certificate
- **Desh Ke Mentor** Certificate
 - * Conducted over 50 one-on-one mentoring sessions within the Desh Ke Mentor program.
 - * **Skills: Communication, Academics, Leadership**