



# Vivaswan Nawani

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DOB: 5th Oct, 2003 | [Github](#) | [LinkedIn](#)

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## Education

### Indraprastha Institute of Information Technology, Delhi

B.Tech(ECE)  
2021 – 2025

CGPA: 8.07  
(till 6<sup>th</sup> Semester)

### Delhi Public School, RK Puram, Delhi

CBSE  
2018 – 2020

Percentage: 89.8%

### Scottish High International School, Gurugram, Haryana

ICSE  
2016 – 2018

Percentage: 90%

## Skills

**Expertise Area** Data Structure and Algorithms, Object Oriented Programming, Machine Learning, Computer Vision, Web Development

**Programming Language** C/C++, Java, Python, SQL

**Tools and Technologies** VS Code, Intelli J, Miro, Figma, Latex  
Git, HTML, CSS, MySQL

**Technical Electives** Data Structure and Algorithms(C/C++), Algorithm Design and Analysis, Advanced Programming (Java), Computer Organization, Operating Systems, Computer Architecture, Machine Learning, Computer Vision

## Work Experience

### Digital India Corporation, MEITY(Industrial)

Guide: Mr. Rajneesh Sharma

(Jun, 24 – Present)

Team Size: Individual

Tech Stack: XAMPP, Laravel, PHP, MongoDB

- Contributed to the Academic Bank of Credit project and enhanced website functionalities.
- Gained experience in backend and frontend development, learned PHP, and worked with XAMPP and MongoDB.

### Undergraduate Researcher at Theoretical Computer Science

Lab, IITD (Research) [Report](#)

(Jan, 24 – Present)

Team Size: 2

Guide: Dr. Diptapriyo Majumdar

- Explored novel algorithmic methodologies for fair allocation and division of resources in graph structures, addressing real-world challenges of equitable resource distribution among stakeholders.

## Projects

### Vector Borne Disease Prediction System - [Github](#)

(Aug, 23 – Dec, 23)

Guide: Dr. Jainendra Shukla

Team Size- 5

Tech Stack: Python, NumPy, Pandas, Scikit-learn, TensorFlow, Seaborn, Matplotlib

- Built a robust model for early detection of vector-borne diseases using patient symptoms as input features.
- Studied and experimented with 7 different machine-learning models and conducted comprehensive testing and hyperparameter tuning.

### Cycle Accurate Simulator for 5-stage CPU - [Github](#)

(Aug, 23 – Dec, 23)

Guide: Dr. Sujay Deb

Team Size- 4

Tech Stack: C++, Python, Assembly Language

- Designed and implemented a detailed RISC CPU in C++
- Structured the code to simulate real CPU operations with an Assembler, Simulator, Instruction, and Data memory, utilizing data buses for data transfer within the CPU.

### Memory Management System - [Github](#)

(Aug, 23 – Dec, 23)

Guide: Dr. Dhruv Kumar

Team Size- 2

Tech Stack: C++, System Calls, Data Structures

- Developed a custom memory management system using C++ and system calls for efficient memory allocation.
- Implemented a free list structure to manage and reuse free memory segments (holes), addressing fragmentation issues.

### Game Galaxy - [Github](#)

(May, 24 – Jun, 24)

Personal Project

Team Size- 5

Tech Stack: Python, MySQL, Flask

- Developed an online Game retail Store using Database Management concepts.
- Implemented the game store as a CLI using embedded SQL and on a website using Flask.

## Positions of Responsibility

- Student Council Representative (Jun, 24 – Present)
- Student Senate Representative (Jun, 23 – Present)
- Btech, Mtech, and PhD Induction Organizing Committee Member (Jun, 24 – Present)

## Awards and Achievements

- Commended by the internationally recognized Earth Saviours Foundation and Sahyog NGO for volunteering to educate underprivileged children and support the disabled.
- Awarded Distinction in Australian National Chemistry Quiz (Class 12th)

## Interests and Hobbies

- Competitive Programming- [Codeforces](#) (1350 rating)
- Chess - Active member of 65th Square since 2023.
- Reading- Enjoy diverse literature, including literary fiction, classics, thrillers, and nonfiction.

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

Vivaswan Nawani

Date: July 7th, 2024