

Pramag Basantia

pramag24421@iiitd.ac.in | Portfolio | Pushp Vihar, Saket, Delhi-110062 | GitHub | LinkedIn

EDUCATION

Indraprastha Institute of Information Technology, Delhi

Jul, 24 - Jul, 28

B.Tech in Computer Science and Mathematics

CGPA: 8.90 (Till 2nd semester)

Ranked 2nd in the Stream

Amrita Vidyalayam, Delhi

Apr, 22 - Jul, 23

CBSE, Standard 12, PCM+CS

Percentage : 91.8%

Amrita Vidyalayam, Delhi

Apr, 21 - May, 22

CBSE, Standard 10

Percentage : 94.8%

SKILLS

Languages: Python, C++/C, Java, SQL

Tools/Tech: GitHub, Linux, Git, Figma, VS Code, IntelliJ IDEA, L^AT_EX

Frameworks: Java Swing, Maven, React, Next.js, TypeScript, Tailwind CSS

Expertise Area: Data Structures & Algorithms, OOP, Operating Systems, Discrete Structures, Probability and Statistics, Linear Algebra, Computer Organisation

PROJECTS

University ERP System | Java, Swing, Maven, MySQL, TCP

Team Size: 2

- Architected a multi-module client-server desktop application managing 500+ course enrollments.
- Engineered a custom TCP protocol with 25+ commands handling authentication and file transfers.
- Implemented notification system with polling-based state management and UI improvements by 25%.

Sep 25 – Nov 25

EGOS Operating System Enhancement | C, RISC-V Architecture

Team Size: 2

- Architected a MLFQ scheduler implementing dynamic process demotion based on time-slices.
- Engineered kernel-level system utilities (grep, wc) using direct syscall interfaces.
- Implemented process lifecycle tracking with 7 real-time metrics across kernel interrupt handlers.

Oct 25 – Dec 25

RISC-V Assembler & Simulator | Python, Computer Architecture, Assembly

Team Size: 4

- Engineered a RISC-V assembler from scratch, implementing lexical parsing and binary encoding.
- Built a cycle-accurate RISC-V simulator with 32 general-purpose registers and 64KB memory.
- Designed an automated testing framework grading system with 20+ test cases and modular architecture.

Jan 25 – May 25

Project Manager | React, Next.js, TypeScript, Tailwind CSS

Team Size: 1

- Built a task management application with real-time state management using React Context API.
- Implemented dynamic sorting and filtering systems, improving workflow efficiency by 30%.
- Engineered an interactive statistics dashboard with circular progress visualization for tracking metrics.

Sept 25 – Dec 25

COMPETITIVE PROGRAMMING

- CodeForces:** Achieved maximum rating of **1509 (Specialist)** (Handle: Pramag_IIITD).
- Meta Hacker Cup 2025:** Secured **Global Rank 2000/5972** in Round 2 and **Rank 2444/13779** in Round 1.
- ICPC:** Secured **Rank 1281/3000** in ICPC Prelims.
- Team Contests:** Secured **Rank 36/340** in Algozenith Prelims and **Rank 56/318** in ICPC de-Tryst (IIT Delhi).
- Intra-College:** Secured **Rank 2** in IIITD Prosort and Armsort (Speed Solving); **Rank 3** in Quant Team Competition.
- Problem Solving:** Solved **1500+ problems** across various platforms including LeetCode, CodeForces, and CodeChef.

POSITIONS OF RESPONSIBILITY

- Member of Foobar** (IIITD Coding Club)
- Member of Quant Society** (IIITD)
- Vice Head Boy and Discipline Head Member** in High School

Nov, 25 - Present

June, 25 - Present

Jun, 22 - Jun, 24

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

Pramag Basantia

Date: December 5, 2025