Pratham Upadhyay

Bachelor of Technology, Electrical Engineering

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🐙 : **prathamu200** 🌐 : **Portfolio**

EDUCATION

Year	Degree	Institute	Score
2022-2026	B.Tech (Electrical Engineering)	Delhi Technological University, New Delhi	8.16 GPA
2021	Class XII (CBSE)	Hansraj Smarak Sr. Sec. School, Delhi	93.0%
2019	Class X (CBSE)	Hansraj Smarak Sr. Sec. School, Delhi	89.0%

TECHNICAL SKILLS

Languages	C, C++, Python, JavaScript, MATLAB, SQL, Bash
Frameworks	React, Next.js, Express, React-Native, Flask, Socket.io, Tailwind, OpenCV
Tools	Git, Arduino IDE, Docker, Firebase, Android Studio, Wireshark, PostgreSQL
Concepts	Data Structures, Computer Vision, REST APIs, Machine Learning, Cybersecurity

PROJECTS

KnightFight – Real-Time Chess Platform — Next.js, React.js, Express, PostgreSQL, Socket.io 🐙 *Code* 🔗 *Live*

- Developed a modern, full-stack chess platform enabling real-time multiplayer gameplay with support for guest users, authentication, and player profiles. Implemented live matches, spectator mode, AI opponents with difficulty levels, and in-game chat using WebSockets (Socket.IO).
- Key features include match history, move tracking (PGN/FEN), game exports, and a fully functional admin dashboard for user and game moderation. The frontend was built with Next.js 15 and Tailwind CSS, while the backend leveraged Express and PostgreSQL with secure JWT-based authentication.

College Help Android App — React-Native, Expo, Firebase 🐙 *Code*

- Built a cross-platform student productivity app with To-Do List, Timetable, Local File Drive, Group Chat, used by over 100+ college students.
- Implemented in-app class reminders, task tracking, and chat with peers. Integrated a webhook-based event alert-based system.

GenAI Text Summarization — Python, Flask, Transformers 🐙 *Code*

- Developed a text summarization platform using Facebook/bart-large-cnn, generating context-aware summaries for articles, youtube videos, and PDFs.
- Concise summaries generated, improving information accessibility and reducing reading time by up to 50%.

Blogging Platform — HTML, CSS, JavaScript, Firebase 🐙 *Code* 🔗 *Live*

- Created a responsive blogging site with rich text editor, user authentication, and real-time post management.
- Achieved 95% Lighthouse performance and SEO score with efficient frontend optimization for smooth UX.

OPEN SOURCE CONTRIBUTIONS

- **IEEE DTU Website**: Contributed to UI improvements and bug fixes and better load performance for a smoother user experience.
- **DB Drawer**: Worked on improving code cleanliness and optimizing schema visualization features for better user interaction.
- **VedAstro**: Rebuilt the UI from a multipage C# layout to a modern JavaScript single page application for faster execution.

POSITIONS OF RESPONSIBILITY

Team Developer — EVRT, DTU *(2023-Present)*

- Designed and developed a fully functional electric car dashboard interface using Python and PyQt5.
- Integrated GUI components with vehicle systems to enable interaction and monitoring of battery, speed, and lights.

Web Executive — IEEE DTU *(2022-2023)*

- Maintained the official IEEE DTU website by resolving bugs, performing routine updates, and improving user experience.
- Contributed to front-end enhancements and optimization for better load performance and accessibility.

CERTIFICATIONS

- **NPTEL Certification**: Machine Learning & Deep Learning: Fundamentals and Applications by IIT Kharagpur.
- **IIT Madras Programming and Data Science**: Completed foundational program covering Python, statistics, and data science concepts.
- **ICSI Certified Network Security Specialist (CNSS)**: Earned recognition in cybersecurity and network defense fundamentals.

ACHIEVEMENTS

- **2nd Place – BitGuard 2.0 (CTF by Mercer Mettl)**: Secured top rank in capture the flag cybersecurity hackathon.
- **Hack-AI-Thon Finalist**: Selected among Top 10 teams nationally; received Certificate of Excellence for building a GenAI summarization tool.
- **CodeChef Contest Rank #7**: Ranked in the top 10 among 700+ participants in IIT Madras Programming Contest.
- Solved over 350+ DSA problems on platforms like LeetCode, Codeforces, and CodeChef.