

# DHRUV SARKAR

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LinkedIn

GitHub

LeetCode

Codeforces

## EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
B.Tech in CSE with specialization in Artificial Intelligence	Netaji Subhas University of Technology (NSUT), Delhi	8.73	2022 – Expected 2026
Higher Secondary Education (Class XII)	TCIS, New Delhi (CBSE)	95.60%	2020 – 2021
Secondary Education (Class X)	TCIS, New Delhi (CBSE)	95.40%	2018 – 2019

## TECHNICAL SKILLS

- Programming Languages:** C, C++, Python
- CS Fundamentals:** Data Structures & Algorithms, OOP, DBMS, OS, Distributed Systems
- Web Development:** HTML, CSS, JavaScript, ReactJS, Next.js, Tailwind CSS, Node.js, Flask, FastAPI
- Databases:** MongoDB (NoSQL), XAMPP (SQL), Supabase (PostgreSQL)
- Machine Learning:** TensorFlow, Scikit-Learn, PyTorch, NumPy, Pandas, Optimization Algorithms
- Developer Tools:** Git & GitHub, VS Code, Postman

## PERSONAL PROJECTS

- Welth – AI-Powered Budgeting and Finance** | *Next.js, Tailwind CSS, Supabase, Shadcn, Gemini*
  - Designed and developed a full-stack web application leveraging AI for **receipt scanning, personalized budgeting, and transaction management**, enhancing user financial literacy.
  - Engineered a scalable schema using **Supabase** and integrated third-party services (ArcJet, Prisma, Inngest) to improve security.
  - Implemented automated email reminders for bill payments, reflecting a commitment to invent and simplify processes for better user engagement.
- Convohub: Real-Time MERN Stack Chat Application** | *MongoDB, Express.js, ReactJS, Node.js, Socket.IO*
  - Crafted a cross-device real-time messaging backend with Socket.IO, demonstrating low-latency event-driven architecture for scalable applications.
  - Optimized MongoDB schemas and indexing to streamline data flow and ensure efficient, enterprise-grade storage and retrieval in production.
  - Developed a responsive, user-centric React frontend with modular components, showcasing maintainable, performance-focused UI—critical for robust SDE deliverables
- OralCare – AI-Driven Dental Imaging Platform** | *ReactJS, Python, FastAPI, Gemini, Roboflow, Shadcn*
  - Built an end-to-end application allowing users to upload dental DICOM images; used **Roboflow's detection models** for visual diagnostics.
  - Integrated Google's **Gemini API** to generate AI-based diagnostic reports and recommendations.
  - Deployed frontend on Vercel and backend on Render, ensuring seamless CORS configuration and a scalable, high-quality solution.
- Heart Risk Predictor: Machine Learning Application** | *Python, TensorFlow, Scikit-Learn, Flask*
  - Deployed a heart disease risk prediction system (team of 3) using **SVM, Logistic Regression, Random Forest, KNN, Neural Network** and ensemble methods.
  - Trained on a public dataset with 1M+ rows and 15+ features, achieving **Accuracy: 95.21%, Precision: 93.16%, Recall: 94.10%**.

## ACHIEVEMENTS

- Achieved a Global Rank of **3490 (top 0.05%)** in **Codeforces Round 1003 (Div.4), February 2025**.
- Earned a 5-star rating in Problem Solving and C++ on HackerRank.
- Solved over **400** coding problems on platforms such as LeetCode and GeeksforGeeks.
- Completed NVIDIA DLI Certification in Deep Learning Fundamentals at NSUT, optimizing a PyTorch neural network to **95.35%** accuracy.

## POSITION OF RESPONSIBILITY

- Co-Head** | *Research Department | Indian Game Theory Society, NSUT* AUGUST 2023 - APRIL 2024
  - Organized events focused on Game Theory in Computer Science and its real-world applications.
  - Conducted research, analyzed scholarly articles, and contributed to the development of Game Theory-based games.
  - Increased online engagement by 100% through strategic social-media and campus initiatives.