DEEP HALDER

Sonepat, Haryana, India
deephalder122002@gmail.com | +91-8101838006 | LinkedIn | GitHub | LeetCode | Portfolio

Professional Summary

CSE undergraduate with strong foundations in **DSA, OS, DBMS, and Networks**. Experienced in building **full-stack applications** with **React, Next.js, Node.js, Express, MongoDB, PostgreSQL**, and designing **microservices** with **RabbitMQ**. Skilled in creating **scalable applications** and **secure APIs**, with over **900 algorithmic problems** solved on **LeetCode, Codeforces, and GFG**. Proven ability to work effectively in teams through hackathons and collaborative projects.

Education

Indian Institute of Information Technology (IIIT) Sonepat — Nov 2022 – Jun 2026
Bachelor of Technology in Computer Science and Engineering — CGPA – 8.33
Relevant Coursework: Data Structures & Algorithms, DBMS, OS, CN, Automata, Compiler Design, OOP (Java/C++), Software Engineering, Big Data, ML, Cloud Computing

Experience & Participation

Hackzilla (National Hackathon) — Team of 4 – Top 5 / 100+ Teams — 2025
- Designed and deployed an ML-based crowd flow predictor to optimize emergency response in dense gatherings.
- Assembled real-time data pipelines for crowd movement, improving response efficiency by **20%**.
- Delivered a fully functional prototype within 24 hours, leading to a Top 5 finish nationally.

Vihaan 8.0 Hackathon — Team of 3 – Participant — 2024
- Developed a healthcare platform enabling real-time doctor–patient communication using WebSockets.
- Integrated appointment scheduling and instant chat features, reducing response delays by **35%**.
- Collaborated in agile sprints, focusing on fast prototyping and usability testing.

Technical Projects

1. **AI Resume Analyzer** (React Router, Puter, Zustand, Tailwind) GitHub — Jul 2025 – Aug 2025
   - Developed a resume analyzer that leveraged GPT models to evaluate resumes against job descriptions
   - Improved client-side storage for resumes using Puter's FileSystem and KV store, ensuring faster resume retrieval.
   - Managed app-wide state using Zustand and enhanced routing with Vite and React Router.
   - Observed 25% faster navigation after migration to Vite.
2. **MovieMania** (React.js, Appwrite, TMDB API, Tailwind CSS) GitHub → Live — Jun 2025 – Jul 2025
   - Built a movie browsing app with React and Tailwind, integrating TMDB API to enable users to explore over **500k titles** with faster query response.
   - Created a trending algorithm using Appwrite Cloud Functions based on user search history.
   - Integrated debounced search, reducing redundant API calls by 30% and improving app responsiveness.
3. **Subscription Tracker** (Express.js, MongoDB, Nodemailer, ArcJet) GitHub — Apr 2025 – May 2025
   - Designed a secure backend API for subscription management using JWT authentication and MongoDB.
   - Automated renewal reminders with Nodemailer, helping users track subscriptions preventing missed renewals by 40%.
   - Enhanced API security with ArcJet, blocking over 100 malicious requests daily and controlling suspicious activity.
4. **Startup Stage** (Next.js, React, NextAuth, Sanity, Sentry) GitHub → Live — Oct 2024 – Nov 2024
   - Created a startup pitching platform enabling dynamic content editing via Sanity CMS.
   - Enhanced performance and SEO by implementing Partial Prerendering and selective hydration in Next.js.
   - Secured user authentication through NextAuth.js and set up real-time error tracking with Sentry.

Academic Projects

1. **Chess Engine** (C++) GitHub — Mar 2025 – Apr 2025
   Developed a chess engine using **bitboards** and the **minimax algorithm** with **alpha-beta pruning**.Achieved **100k+ positions evaluated per second**, implemented efficient move generation, board evaluation heuristics, and legal move validation, outperforming a naive array-based implementation by **3x speed**.
2. **WSN Optimization using Ant Colony Algorithm (Python)** GitHub — May 2024 – Oct 2024
   Simulated energy-efficient routing in a **1000-node** Wireless Sensor Network using ACO, achieving **12% lower energy consumption** and **15% longer network lifetime** compared to LEACH and Flooding protocols. Optimized adaptive pathfinding by mimicking real-world ant behavior for dynamic network loads.

Technical Skills

Programming Languages: JavaScript, TypeScript, C, C++, Java, Python, SQL
Frontend: React.js, Next.js, Tailwind CSS, Zustand, HTML, CSS
Backend: Node.js, Express.js, RESTful APIs, WebSockets (Socket.IO), RabbitMQ
Databases: MongoDB, PostgreSQL, Prisma ORM
DevOps and Cloud: Git, GitHub, Docker, Linux (Bash), Cloud Deployment (Vercel, Netlify)
Other: Authentication (JWT, OAuth), PDF.js, ShadCN UI

Achievements

Solved 600+ problems on **LeetCode**, **Codeforces** (rated 1114), **GFG**.
Ranked **Top 5/100+** at **Hackzilla** (national-level hackathon) for developing an ML-based crowd flow predictor to optimize emergency response in dense crowds.
Collaborated in a 3-member team at **Vihaan 8.0** hackathon to build a healthcare app with real-time doctor–patient communication.