

AYUSH CHAVAN

Pune, Maharashtra

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LinkedIn

GitHub

Education

Vishwakarma Institute of Technology | CGPA: 8.58
B.Tech - Computer Science and Engineering(Artificial Intelligence)

09 2023 - 06 2027
Pune, India

KKW College, Pimpalgaon Baswant | 90.83%
Higher Secondary Certificate (HSC) - Science

2021 - 2023
Nashik, India

Adarsh English Medium School, Pimpalgaon Baswant | 91.40%
Secondary School Certificate (SSC)

2009 - 2021
Nashik, India

Projects

God's Hand (Rubik's Cube Solver) | C++, CMake

🔗 GitHub

- Achieved a solving time of under **1 second** for a Rubik's Cube scrambled **14 times** using the **Korf IDA*** Algorithm.
- Reduced memory usage by **11.11%** through efficient cube state representation and **bitwise data encoding**.
- Accelerated runtime by up to **73%** using iterative deepening with heuristic pruning, outperforming **Dijkstra** in optimal shortest-path search.

DevFlow - AI-Powered Online IDE | Next.js, Docker, Node.js, Gemini AI

🔗 GitHub

- Multi-language IDE for JavaScript, Python, C++, Java with **Gemini AI** for code assistance.
- Engineered **Docker-based isolation** with resource limits (**256MB memory, 50% CPU, 10s timeout**) per execution, achieving **0% crash rate** and complete security against malicious code.
- Implemented **queue management** handling **10 concurrent executions** and **200+ requests** with **100% stability**.

Real-Time Collaborative Whiteboard | Next.js, TypeScript, Liveblocks

🔗 Live | ↗ GitHub

- Developed a multi-user **whiteboard** enabling instant shared drawing, live cursor presence, and undo/redo history.
- Implemented a robust toolset featuring **pen, eraser, geometric shapes, and text notes**, coupled with smooth **zoom and pan** functionality to create a versatile and intuitive visual collaboration workspace.
- Integrated **Liveblocks** for real-time sync, **Convex** for backend persistence, and **Clerk** for secure authentication.

Blogify - Comprehensive Blogging Platform | Node.js, Express, MongoDB

🔗 Live | ↗ GitHub

- Designed an **intuitive and secure platform** for crafting, managing, and engaging with blogs.
- Built using **MVC architecture**, employing EJS and Bootstrap for a **responsive UI**.
- Implemented **JWT-based authentication** and **custom encryption**, with Firebase for **media handling**.

Honors & Awards

- **ICPC Asia West Regionalist (2025)**: Qualified for prestigious regional level of the programming contest.
- **First Runner-up** among **450+ teams** at InC Pradnya 2025 (Global level CP Contest) held at PICT, Pune.
- Secured **1st Position** in Prelims and **4th Position** in Onsite Finals at **WCPC 2025** (State Level Competitive Programming Contest) at Walchand College.
- Achieved top national ranks: **AIR 90, 104, & 141** in LeetCode Biweekly Contests 155,161 and 160.
- Secured **Global Rank 62** and **Global Rank 90** in CodeChef Starters 132 and 157.
- Solved **1500+** algorithmic problems and achieved **Specialist(Max Rating : 1587)** title on Codeforces.
- **Guardian** on LeetCode (**Max Rating : 2143**), among **Top 1.2%** globally and solved **700+** problems.
- **4-Star Coder** on CodeChef (**Max Rating: 1817**).
- Solved more than **2500 problems** on Data Structures and Algorithms across various coding platforms.

Technical skills

Languages & Tools: C/C++, JavaScript, SQL, Java, TypeScript, Postman, CMake, Git, GitHub, Clerk, Convex, MongoDB

Frameworks: Node.js, Express.js, React.js, Next.js

Coursework: Data Structures & Algorithms, Web Development, Database Management Systems, Computer Networks, Operating Systems, Competitive Programming, Object-Oriented Programming

Coding Profiles

Codeforces ↗

LeetCode ↗

CodeChef ↗

HackerRank ↗

SPOJ ↗