Utkarsh Kushwaha

lacktriangle Jabalpur, India \cline{J} +91 8305212146 $\cline{lacktriangle}$ utkarshkushwaha246@gmail.com $\cline{lacktriangle}$ utkarsh-works $\cline{lacktriangle}$ utkarsh

Summary

AIML undergraduate passionate about building scalable, user-focused solutions using AI and full-stack technologies. Skilled in Python, C++, JavaScript; driven by innovation, curiosity, and real-world impact.

Experience

Artificial Intelligence and Machine Learning Intern

June 2025 - July 2025

Edunet Foundation - SHEEL

Romot

• Engineered a Water Quality Prediction System with 92% accuracy to determine potability levels based on chemical parameters using Python, Pandas, Scikit-learn.

• Slashed manual testing time by 40% through automation and enhanced prediction reliability by 25% through feature engineering.

Education

Gyan Ganga Institute of Technology and Sciences, RGPV

2024 - 2028

B. Tech in Computer Science and Engineering (AI & ML) (CGPA: 7.33)

Jabalpur, India

Technical Skills

Programming Languages: Python, JavaScript, C, C++, SQL

Web Technologies: HTML, CSS, Next.js, Node.js, Express, Django, Flask

Databases & Cloud: Firebase, MongoDB, MySQL

Tools & Platforms: Git, GitHub, Postman, VS Code, Vercel, Linux

Certifications

• Oracle: Oracle Cloud Infrastructure 2024 Generative AI Certified Professional (2024), Oracle APEX Cloud Developer Certified Professional (2025)

• Cisco: C++ Essentials 1 (2025)

• Red Hat: Linux Fundamentals (RH104 - RHA) - Ver. 9.1 (2025)

Projects

AlgoVisualizer - Interactive algorithm visualizer

HTML, CSS, JavaScript, Django, WebSockets, Gemini API

 $Educational\ Platform$

• Built the backend of a platform to visualize algorithms based on user inputs, improving learning outcomes for students.

• Integrated tracking of learning progress, AI-powered doubt resolution, and real-time mentor chats, resulting in 35% better algorithm comprehension and 40% faster debugging.

Votex - The decentralized voting system

Next.js, Firebase Auth, Firestore, Blockchain

Secure Voting Platform

- Spearheaded the backend of a secure online voting platform, implementing preloaded voter verification, real-time session control, and seamless admin monitoring with 99.9% uptime.
- Enhanced scalability and data integrity with 100% tamper-proof records by integrating Blockchain for decentralized trust.

Water Quality Prediction System

Python, Pandas, Scikit-learn

ML-based water safety predictor

- Constructed a machine learning solution in Python to predict water safety from chemical parameters with 92% accuracy across 8 key water quality indicators.
- Orchestrated data cleaning, feature selection, model training, and evaluation to deliver accurate, real-world water quality assessments, reducing manual testing costs by 60%.

Leadership & Involvement

Campus Lead

Hack With India (HWI)

• Led 5+ workshops and hackathons for 300+ students, fostering tech engagement and partnerships.

Technical Lead

AIAlchemist

• Guided 3 projects, mentored 10+ peers, and led 8 sessions to grow a 150+ member AI community.

Achievements

- 1st Runner-Up at Genethon Hackathon Spearheaded backend development, crafted secure APIs, and implemented authentication, outperforming 50+ teams.
- Top 10 Finalist at BrahmaX Hackathon Architected scalable backend features and streamlined data flow, helping the team achieve a top 10 position out of hundreds of participants.