Utkarsh Kushwaha

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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   *Remote*

- 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.