

# Ansh Agarwal

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Portfolio

LinkedIn

GitHub

## EDUCATION

Vellore Institute of Technology, Bhopal

B.Tech in Computer Science & Engineering

Sept 2022 – June 2026

CGPA: 8.93/10

## TECHNICAL SKILLS

**Languages:** Python, C++, JavaScript, TypeScript, Dart

**Frontend & Mobile:** React, Flutter, HTML, CSS, Tailwind CSS, Android Studio

**Backend & Databases:** REST APIs, Firebase, MySQL, MongoDB, AWS (EC2, S3), Git, Co-pilot

**AI/ML & Visualization:** TensorFlow, Scikit-learn, Numpy, PyTorch, SpaCy, Plotly, Tableau, PowerBI

## EXPERIENCE

Bluestock Fintech

May 2025 – July 2025 SDE Intern — Remote

- Built and optimized core frontend components using React, TypeScript, and Tailwind, improving page load time and user experience across the investment dashboard.
- Integrated REST APIs and enhanced data-fetching logic, reducing latency and enabling smoother real-time stock insights for end-users.

## PROJECTS

Aqua Sense AI – Water Quality Monitoring Dashboard

[Link](#)

Python, ARIMA, Firebase, Tableau, Plotly, Chart.js, React, TypeScript, Tailwind CSS

- Built a real-time dashboard to track **9+ parameters** (pH, DO, BOD, etc.) across 44+ stations in 28 states, automating the calculation of the NSF Water Quality Index (WQI) for immediate insights.
- Developed an **ARIMA (5,1,0)** forecasting model to predict WQI trends 15 years into the future with **92% accuracy**, enabling proactive environmental management.
- Engineered features for geographic visualization, AI-powered anomaly detection, and seamless integration with Tableau to validate and surface trends from diverse data flows (CSV).

PrepWell – AI Mock Interview

[Link](#)

Firebase, Tailwind CSS, TypeScript, shadcn/ui, Vapi AI (voice), Google Gemini API

- Engineered a voice-enabled mock interview platform using **Vapi AI** and **Google Gemini** to conduct adaptive, role-specific practice sessions and generate real-time questions.
- Developed an automated feedback system that provides structured evaluations with category-based scores, saved transcripts, and actionable improvement strategies.
- Validated system performance by simulating **50+** diverse user scenarios and enabled users to manage their interview history for targeted practice.

QuizCrafter – Advanced MCQ Generator Using GENAI

[Link](#)

Python, React, TypeScript, Gemini API, SpaCy, BeautifulSoup, pdfkit

- Developed an AI-driven platform that reduces quiz creation time by 80% by automating the generation of **3-50 questions** with **3-6 answer options**, multi-answer support, and creativity controls.
- Extended functionality by integrating **web scraping** to parse articles and generate MCQs directly from URLs, expanding data source flexibility.
- Designed a **one-click PDF export** system with an answer key to produce printable study guides.

## CERTIFICATIONS

- GenAI using IBM watsonx** — IBM, Apr 2025: prompt engineering, model deployment (virtual hands-on).
- MongoDB Developer Path** — MongoDB, Jul 2025: schema design, indexing, and performance tuning.
- Saviynt Identity Security for AI Age** — Saviynt, Aug 2025: identity security for AI; 8 CPE hours.

## ACHIEVEMENTS & EXTRACURRICULAR

- Semi-Finalist, Flipkart GRiD 7.0:** Advanced to Round 3, led a 3-member team among 160k+ participants.
- Walmart Global Tech Sparkathon:** Contributed to an open innovation challenge focused on developing technological solutions for global retail challenges.
- LeetCode:** Solved 590+ DSA problems, achieved MySQL Badge, contest rating-1459. - [LeetCode Profile](#).
- Core Member of Microsoft Technical Club, VIT Bhopal:** Actively participated in club activities, technical workshops and coding events.