Ashutosh Jaiswal

Education

International Institute of Information Technology - Naya Raipur

B. Tech in Computer Science: Data Science & Artificial Intelligence

2022 - 2026

CGPA: 7.6/10

Work Experience

SKDIV Industries Pvt. Ltd.

Software Development Intern — Frontend (Remote)

• Developing cross-platform desktop applications with **React.js** and **Electron**, integrating **REST APIs** and **WebSockets** for real-time communication.

- Implemented an in-app messaging system using WebSockets, enabling secure and scalable real-time interactions.
- Built a role-based access control module and optimized state/data workflows for secure multi-level user management.
- Automated build and deployment pipelines with GitHub Actions (CI/CD), improving release efficiency and reliability.

KNUCT Technologies

Oct. 2024 - Mar. 2025

Sept. 2025 - Present

Computer Vision Intern (Remote)

- Built a satellite image super-resolution pipeline using interpolation, edge detection, and FFT-based filtering.
- Applied Sobel filters, Gaussian high-pass, and sharpening kernels for enhanced detail and edge clarity.
- Matched SRGAN/EDSR in perceptual quality with PSNR: 24.40, SSIM: 0.8704, LPIPS: 0.4222.

IIIT-Naya Raipur

July 2024 – Dec. 2024

Teaching Assistant — Data Structures and Algorithms

- Mentored a selected cohort of **30 juniors**, conducting regular DSA sessions and one-on-one doubt-clearing.
- Provided guidance on algorithms, code quality, and interview preparation with live problem-solving.

Projects

PosterStash — React, Firebase, AWS, FastAPI, Razorpay, Google OAuth2

Live Site

- Built a campus e-commerce platform with Google OAuth2 authentication, role-based access, and secure payments.
- Integrated Firebase Realtime DB and AWS S3 for data and asset storage; deployed via CI/CD pipelines on AWS EC2.

Study-Simplify — FastAPI, React, Tesseract OCR, NLP, Transformers

Source Code — Live Demo

- Developed an AI platform to transcribe, summarize, and generate questions from PDFs, PPTs, and images.
- Implemented OCR (Tesseract), summarization (BERT/T5), and interactive quiz generation with keyword-based summaries.

CodePlus — ReactJS, Node.js, Express, Redis, Codeforces API, Nodemailer

Source Code — <u>Live Demo</u>

- Built a Codeforces analytics tracker with ReactJS and Express.js, integrating Redis for caching and API efficiency.
- Automated periodic data fetch via cron jobs, providing contest history, rating analysis, and activity tracking.
- Implemented refresh endpoints, rate limiting, and personalized inactivity alerts via email (Nodemailer).

HRBot-3000 — FastAPI, Scikit-learn, Gemini API, Docker, Azure ML

Source Code

- Developed an end-to-end HR analytics system for resume screening, ATS scoring, and JD matching using NLP.
- Trained attrition prediction models with SMOTE and ensembles; used Gemini API for actionable HR suggestions.
- Packaged APIs with Docker and deployed on Azure ML Studio for scalable, cloud-based inference.

Technical Skills

Languages: Python, C/C++, JavaScript, Dart, Solidity

Frameworks: React.js, Node.js, Express.js, FastAPI, Flask, Django, Flutter

AI/ML: Scikit-learn, TensorFlow, PyTorch, OpenCV, Transformers, OpenAI APIs

Cloud & DevOps: AWS, GCP, Docker, Git, GitHub Actions, Linux

Databases: Firebase, MongoDB, MySQL, Redis

Positions of Responsibility

Training and Placement Cell — Placement Coordinator

March 2024 - Present

• Coordinated campus recruitment drives and liaised with companies to align hiring needs with student profiles.

The Society of Coders — Vice Secretary

Dec. 2022 – May 2025

Organized coding challenges and hackathons, mentoring juniors in DSA and problem-solving.

Extra Curricular

- Head Event Coordinator, Hack-a-Sol 3.0 IIIT-NR's pan-India hackathon, leading a team of 50 members.
- Co-founded PosterStash, a campus-focused e-commerce startup; launched MVP and scaled seasonal drops, increasing sales and profits through targeted operations and marketing.