Ashis Kumar Mishra

EDUCATION

National Institute of Technology, Rourkela

Nov 2022 - Present

Bachelor of Technology in Electronics and Instrumentation Engineering (CGPA - 8.85)

Rourkela, Odisha

Kendriya Vidyalaya No-3, Bhubaneswar

May 2021

CBSE, Science (PCM) (Percentage - 95.6%)

Bhubaneswar, Odisha

RELEVANT COURSEWORK

• Data Structures and Algorithms

Object Oriented ProgrammingSystem Design

• Computer Networks

• Web Development

• Operating System

• Machine and Deep Learning

• Database Management System

WORK EXPERIENCE

National Institute Of Technology, Rourkela

May 2025 - present

Machine Learning Intern

GitHub | Website

- Preprocessed **EEG** dataset handling missing values, signal artifacts, and class imbalance; engineered **48+ clinical** features including spectral entropy and Hjorth parameters.
- Optimized ML pipeline achieving 84.02% accuracy and 0.840 F1-score with XGBoost, implementing comprehensive error handling and artifact detection protocols.
- Built interactive **Streamlit** web application for real-time EEG prediction with **rankings** and **medical visualization PROJECTS**

EduCRAFT: Course Navigator

Sept 2024 - Feb 2025

NextJS, React, Neon DB, Google's AI, Drizzle ORM, YouTube API, AceternityUI, Vapi

GitHub | Website

- Built an AI-powered course navigator using GeminiAI and YouTube API, reducing manual search time by 40%.
- Integrated a smart PDF Q&A module enabling users to upload documents and interact with content using AI.
- Implemented mock interview simulations with audio , feedback and AI-led resume analysis.
- Boosted backend performance by 35% using NeonDB and Drizzle ORM for fast and scalable queries.

GoFlow Atom Mail: AI-Enhanced Email Service

Nov 2024 - Mar 2025

 $Next.js,\ React,\ Gmail\ API,\ Gemini\ API,\ Convex\ DB,\ ShadCN\ ,\ Pinecone\ ,\ OAuth$

 $GitHub \mid Website$

- Built an intelligent **Gmail-integrated assistant** to organize, fetch, and summarize inbox content.
- Designed a **Chatbot** interface to **prioritize and summarize** emails based on keyword relevance.
- Enabled auto-generated replies with Gemini AI using tone-aware, predictive response generation.
- Implemented semantic email search using Nomic Embed Text and Pinecone vector DB.

ACHIEVEMENTS

- AI Medical Diagnose — ISM Dhanbad Hackathon (5 $^{\rm th}$ of 80 Teams)

Apr 2025

Built a multi-disease prediction DL model to detect diabetes, heart disease, and breast cancer. Github | Website Suggested personalized diagnoses and improvements using real-world medical data. Certificate AI Bot with voice and image input using GROQ AI, multimodal LLM, ffmpeg, PortAudio, gTTS, and Gradio.

• Competitive Programming Achievements

Dec 2024

Secured highest global LCCS rank 427 in biweekly contest 143, 2293 in Codeforces (Ed. Round DIV 3),

RankList

CERTIFICATIONS

• Certified in Machine Learning, Deep Learning and NLP Skilled in ML models, deep learning, and NLP applications.

Jan 2025 Certificate

• Certified Web Developer and Java Programmer

May 2024

Proficient in building responsive, scalable web applications and advanced Java programming. Certificate1 Certificate2

TECHNICAL SKILLS

• Languages: Java, Python, JavaScript, SQL Databases: MySQL, MongoDB, PostgreSQL

• Developer Tools: VS Code, Jupyter Notebook, Git, Google Colab

• Libraries/Frameworks: Node.js, Express.js, React.js, JavaScript, Next.js, Rest API, Shadon UI, Firebase

EXTRACURRICULAR ACTIVITIES

Conducted Coding Workshops in Underprivileged Communities

Feb 2024

• Led interactive coding workshops for children in underserved areas, empowering them with foundational programming skills and enhancing digital literacy.