

Aishik Pal

Machine learning and Prompt Engineer

8972176800 | palaishik3@gmail.com |

20/3 Radhanath sikdar sarani, Rabindra Nagar, Siliguri, West Bengal , 734006, India | Open to Remote | Open to Hybrid | Open to On-Site | [LinkedIn](#) | [GitHub](#) | [Twitter](#)

SUMMARY

I am a passionate and innovative AI and Machine Learning practitioner with deep expertise in **Convolutional Neural Networks (CNN), Deep Learning, and Natural Language Processing (NLP)**. With a strong foundation in **AI development, prompt engineering, and web technologies**, I seamlessly integrate intelligent solutions into real-world applications. My technical proficiency spans **Python, SQL, C++, HTML, and CSS**, enabling me to develop cutting-edge AI-driven systems. I have showcased my problem-solving skills and creativity through multiple prestigious competitions, including the **Smart India Hackathon 2024 Grand Finale**, where I co-developed **SUBTLE**—a smart UV-C bottle featuring **nano-bubble technology, real-time health monitoring, and IoT-based analytics**. As the **Winner of FrostHacks 1.0**, I further demonstrated my ability to design and execute high-impact tech solutions. My AI expertise extends to **precision agriculture**, where I developed a **Potato Leaf Disease Detection system** using **CNN and TensorFlow** as part of my internship at **Edunet Foundation (AICTE TechSaksham, Microsoft & SAP CSR Initiative)**. Additionally, my internships at **NHPC and EMU Carshed (Indian Railways)** have provided me with hands-on experience in **electrical systems, AI integration, and software development**. Fueled by an insatiable curiosity for **sustainability, automation, and AI-driven innovation**, I strive to develop **scalable, efficient, and impactful solutions** that redefine technology's role in improving lives and industries.

EDUCATION

Kendriya Vidyalaya Sevoke Road , Salugara, India - Higher Secondary , Science Apr 2019 - Jul 2021
Kendriya Vidyalaya Sevoke Road , India - Secondary , Science Apr 2020 - Mar 2022
University Institute Of Technology, The University Of Burdwan , Bardhaman , India - Bachelor of Engineering, Electrical Engineering Nov 2022 - Present

CERTIFICATIONS

AICTE - Internship on AI: Transformative Learning with TechSaksham (Microsoft & SAP CSR Initiative), Edunet Foundation Feb 2025
MyGov Quiz Certifications (Government of India Platform) Earned multiple certifications on diverse topics., MyGov.in
NHPC Internship – Hands-on experience in power generation & electrical machines., National Hydroelectric Power Corporation Limited Oct 2024
EMU Carshed, Tikiapara (Indian Railways) – Gained knowledge in locomotive maintenance & power electronics., South Eastern Railway Nov 2024
Smart India Hackathon Grand Finalist 2024 Dec 2024
FrostHacks Session 1.0 Winner Feb 2025

AWARDS

Winner - FrostHacks Session 1.0 (2025) Developed a tech-driven water purification system with an innovative approach, beating top competitors., Academy Of Technology Feb 2025
Grand Finalist - Smart India Hackathon 2024 (SIH 2024) Designed AquaSuraksha Pro (Project SUBTLE) – A Smart Sustainable UV-C Bottle with real-time TDS monitoring & nano-bubble technology. Selected among the best national innovations, proving its impactful & scalable potential., Smart India Hackathon Dec 2024
3rd Position – AURA (Aliah University Research Aspiration) Session 2.0 (2025) (Recognized for research excellence and innovation), Aliah University Feb 2025

PROJECTS

Smart Sustainable UV-C Bottle (SIH 2024 Finalist & FrostHacks 1.0 Winner) Integrates UV-C purification, nano-bubbles, and TDS monitoring for next-gen water safety. Mobile App: Alerts for hydration reminders & real-time purification insights.

Software Development Projects: Netflix Clone, Spotify Clone, Myntra Clone (Frontend & UI Development) Weather App, Calculator Webpage, Analog Clock (JavaScript-powered utilities)

Potato Leaf Disease Detection Developed a deep learning model using CNN & TensorFlow to detect leaf diseases in potatoes.

SKILLS

Artificial Intelligence & Machine Learning	: Deep Learning, Convolutional Neural Networks (CNN), Natural Language Processing (NLP), Machine Learning Algorithms, AI Model Deployment, Prompt Engineering, TensorFlow & Keras, PyTorch
Software & Web Development	: Python (Core Programming, AI, ML, Web Apps), C++ (DSA, Competitive Programming), SQL (Database Management), HTML, CSS (Web Development), JavaScript (Front-End & Basic Functionalities), Web App Development (Static & Dynamic Websites)
Hardware & IoT Development	: Embedded Systems (Arduino, Sensors, IoT Integration), Circuit Design & Prototyping, Power Electronics (SCR, Choppers, MOSFET, BJT, Amplifiers), Electrical Machines & Systems
Data Science & Analytical Skills	: Data Preprocessing & Cleaning, Data Visualization (Matplotlib, Seaborn), Statistical Analysis, Big Data Handling
Cloud, Automation & AI Tools	: ComfyUI (AI Image Generation), Stable Diffusion (AI-Powered Image Processing), Google Colab & Jupyter Notebook (AI/ML Development Environments)
Competitive Coding & Problem Solving	: Codeforces & CodeChef Participation, DSA (Data Structures & Algorithms)
Interests	: I am deeply interested in Artificial Intelligence, Machine Learning, and Deep Learning, with a strong passion for AI-driven innovations, automation, and sustainable technology solutions. I enjoy working on hardware-integrated AI projects, web development, and competitive coding, while also actively participating in hackathons, research, and technological problem-solving to create impactful solutions.
Languages	: Python (AI, ML, Web Development), C++ (Competitive Programming, DSA), SQL (Database Management), HTML & CSS (Web Development), JavaScript (Front-End Development)