Lalatendu Kumar Sahu - AI/ML

✉ lalatendukumarsahu@gmail.com 📞 7008455538 📍 Berhampur, India

🔗 linkedin.com/in/lalatendu-kumar-sahu-b127a7325

SUMMARY

Results-driven B.Tech CSE student specializing in Artificial Intelligence and Machine Learning, with two research publications and a proven track record of innovation as a 2× BPUT Hackathon winner. Skilled in Python, machine learning, deep learning, computer vision, and data analytics, strengthened through internships at Edunet Foundation and Digital Blink. Experienced in developing real-time AI systems, accessibility-focused solutions, and performance-optimized ML models. Equipped with strong analytical abilities, certified technical expertise, and a passion for building impactful, scalable AI solutions that drive organizational growth.

SKILLS

Programming — Python , C

AI/ML/DL — TensorFlow, Keras, PyTorch, Scikit-learn, OpenCV, NumPy, Pandas, MediaPipe, Hugging Face Transformers.

Concepts — CNN, RNN, Transformers, Reinforcement Learning, Generative Models, NLP, Computer Vision

PROJECTS

Bi-Directional Emotionally Intelligent Sign & Speech Interpreter
Built a real-time sign-to-speech and speech-to-sign translation system using deep learning, computer vision, and NLP, integrating emotion detection for enhanced accessibility. *BPUT Hackathon Winner.*

AI-Driven Solar Panel Cleaning and Efficiency Optimizer
Developed an ML-powered system for dust detection, automated cleaning, and energy optimization using CV and IoT sensors. Improved panel efficiency and reduced manual maintenance. *BPUT Hackathon Winner.*

X-ray Fracture Detection Using Deep Learning
Implemented a CNN-based diagnostic model with preprocessing, transfer learning, and Grad-CAM explainability to detect fractures on MURA X-ray dataset.

EXPERIENCE

AI & Data Analytics, *Intern - Edunet Fundation*
- Worked on data preprocessing, feature engineering, and ML model development for real-world datasets.
- Applied statistical analysis, visualization, and predictive modeling techniques to improve model insights and performance.
- Gained hands-on experience in Python, ML workflows, and industry-standard analytical tools.

AI/ML, *Intern - Digital Blinc*
- Developed an **AI-powered Educational Chatbot**, focusing on data processing, intent classification, and conversational model training.
- Implemented advanced AI techniques to enhance chatbot accuracy, contextual response generation, and user engagement.
- Worked on optimizing training pipelines, validating model performance, and integrating the chatbot into a scalable application environment.
- Collaborated with the AI team to improve system reliability and deploy ML models in real-time use cases.

EDUCATION

Kalam Institute Of Technology, *BTech (CSE)*   2022 – 2026

Berhampur City College, *12th*   2020 – 2022

ACHIEVEMENTS & CERTIFICATIONS

AI/ML — SimpliLearn

Deep Learning — SimpliLearn

— **2× BPUT Hackathon Winner** – Developed *Bi-Directional Emotionally Intelligent Sign & Speech Interpreter* and *AI-Driven Solar Panel Cleaning & Efficiency Optimizer*.

— **Published 2 Research Papers** in the field of Artificial Intelligence, Machine Learning And Deep Learning