

Subhranil Nandy

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📍 West Bengal, India

🕒 Subhranil2004



🎓 Education

Indian Institute of Engineering Science and Technology (IIEST), Shibpur, Howrah,

2022 – 2026

B.Tech, Information Technology (IT) [🔗](#)

CGPA 9.31/10 | Upto 4th Semester

M. C. Kejriwal Vidyapeeth, Liluah, Howrah, ICSE, ISC [🔗](#)

2008 – 2022

ISC(XII) (PCM, CS and English) - 96.5% (2022)

ICSE(X) – 96.6% (2020)

💼 Experience

● Indian Institute of Technology, Kharagpur, Summer Research Intern [🔗](#)

May 2024 – Jul 2024

Kharagpur, West Bengal

- Dept.: Center of Excellence in Affordable Healthcare (CoE-AH)
- Worked on smart healthcare edge devices for measuring a person's vital signs.
- Created a wearable health device prototype that tracks heart and breathing rates in real-time with a mean absolute error (MAE) of around **1.0** units.

● GirlScript Summer of Code (GSSoC'24), Open-source Contributor

May 2024 – Jul 2024

Remote

- Ethnicity Classification of Asian People [🔗](#)
- Pneumonia Classification using Chest X-Ray [🔗](#)

📁 Projects

● MNIST Handwritten Digit Classification Web app, Tensorflow, Pandas, Matplotlib, Python | Link [🔗](#)

Mar 2024 – May 2024

- Used Data augmentation, Deep Neural Networks (DNN) and CNNs, achieving an **accuracy of 99.45%** on the MNIST test dataset (Hosted using Streamlit)

● Facial Emotion, Age and Gender extraction from Raspberry Pi based Video Surveillance with low cost webcams, Raspberry Pi 3B+, OpenCV, Tensorflow, Python

Mar 2024 – May 2024

- Conceptualised an edge device consisting of Raspberry Pi integrated with a webcam.
- Created lightweight models using **Tensorflow lite (.tflite) models** to recognize gender, emotion and age from **real-time** videos captured using the webcam (edge device).

● Pneumonia Classification using Chest X-Ray images, Tensorflow, Pandas, Matplotlib, Python

May 2024 – Present

- Currently experimenting with CNN architectures and different transfer-learning models like VGG16, MobileNet, and ResNet to achieve an efficient performance.
- Achieved a **precision of 95%** so far on binary classification with the **VGG16** model.

🧠 Technical Skills

● Languages and FrameWorks :, Java, Python, C, MATLAB, TensorFlow, Keras, Qiskit, scikit-learn, OpenCV

● Tools and Technologies:, VS Code, JupyterLab, Anaconda, Linux, Git and GitHub, Raspberry Pi, Arduino

📄 Publications

Deep Feature Learning for Detecting Water Pollution from Industrial Waste,

2024

Sneha Singh, Suranjana Saha, Subhranil Nandy, Dr. Mahua Nandy Pal, Dr. Tien Anh Tran

Accepted in 8th International Conference On Emerging Applications of Information Technology, 2024, Kolkata. Will be published in "Lecture Notes in Networks and Systems", Springer Nature (In press) [🔗](#)

🏆 Achievements

● Jagadish Bose National Science Talent Search (JBNSTS) Scholarship

2021 – 2022

Among the 203 Scholars selected for the JBNSTS Junior Scholarship from West Bengal in 2020.

● Exam Ranks, • JEE Advanced: AIR 5556 • JEE Main: AIR 12943 • WBJEE: Rank 843

2022

📖 Courses

Advanced Learning Algorithms, DeepLearning.AI | Certificate [🔗](#)

Machine Learning Crash Course with TensorFlow APIs, Google [🔗](#)

Quantum Explorers (Using Qiskit SDK), IBM | Badge [🔗](#)

🎯 Interests

Synthesizer | Fitness Enthusiast | Singing | Reading