

SUPRATIK BHOWAL

+916289552885 | ✉ Supratik.Bhowal2024@iem.edu.in | [in Supratik23](https://www.linkedin.com/in/Supratik23) | [SupratikB23](https://github.com/SupratikB23) | [Portfolio](#)

SKILLS

Programming Languages: Python, Objective-C, C++, Java, HTML5

ML/DL: PyTorch, Tensorflow, SciPy, OpenCV, Scikit-Learn, Pandas, NumPy, Matplotlib, Plotly

Technologies & Frameworks: Machine Learning, Deep Learning, Reinforcement Learning, Computer Vision, Kaggle, MySQL, GCP

Languages: English (Full Professional Proficiency), Bengali (Native), Hindi (Limited Working Proficiency)

EDUCATION

Institute of Engineering and Management

B.Tech Computer Science (AI & ML): YGPA – 9.1 (1st yr)

Kolkata, India

2024 - Present

Relevant Courses: Data Structure and Algorithm, Design and Analysis of Algorithms, Discrete Math, COA, AIML

South Point High School

PCM with Computer Science: %age – 90% (12th) & 95 % (10th)

Kolkata, India

2010 - 2024

Relevant Courses: Python Programming, Database, Basics of Network

EXPERIENCE

Media Nirvana — AI Intern

Kolkata, India

Develop AI workflows and integrate AI-driven CRM systems and WhatsApp bots into startup services

Jan 2026 – Present

IEM with IIT Mandi Chapter — HCI Research Intern

Kolkata, India

Conducting research in Human-Computer Interaction, focusing on innovative interfaces and robot training.

July 2025 – Present

IEM Centre of Excellence for Data Science (CEDS) Winter Internship — Project Intern

Kolkata, India

Created a Project on 'Forward Collision Avoidance in Autonomous Driving' using ADAS & computer vision.

Jan 2026 – Feb 2026

IEEE Engineering Medicine and Biology Society — Student Research Intern

Pune, India

Developed DL algos for 'Epileptic Seizure Detection and Prediction' under mentorship of Prof. Sneha Deshmukh.

Jun 2025 – Jul 2025

Google Cloud Arcade Facilitator Program — Open Source Contributor

Remote

Participated in Google Cloud Skills Boost labs for a cohort of learners in a gamified cloud-learning environment.

Jan 2025 – Jun 2025

Social Winter of Code (SWOC) — Open Source Contributor

Remote

Actively contributed to open-source and resolved issues and solved front-end & back-end issues.

Jan 2025 – Mar 2025

PROJECTS

Agentic HR Operations Assistant: Python, NLP, RAG, Faiss Vector Database, PyTorch

NLP-powered system that answers complex HR policy queries using RAG and executes HR actions from natural language.

HarmonyRL: Python, HuggingFace, PyTorch, Scipy, Librosa, RL

Deep Learning framework for generating symbolic music (MIDI) using Supervised Learning, Reinforcement Learning (RL), and Diffusion-based Postprocessing.

Epilepsy Prediction & Detection: Python, Scikit-learn, TensorFlow, Scipy

DL algorithms for real-time Seizure Detection/Prediction on EEG signals. CNN-BiLSTM achieved 98% prediction accuracy, while the Transformer model showed 89% detection accuracy. (IEEE EMBS Internship)

Arabic Dates Classification: Python, PyTorch, ResNet50

A deep learning model using ResNet50 to classify and recognize different Arabic date varieties with high accuracy. (Open Source)

Poker Hand Prediction: Python, NumPy, Scikit-learn, Pandas

Built ML & DL models that predict poker hand categories based on dealt cards. Combined multiple algorithms including Random Forest, SVM, and MLP Classifier into a Stacking Classifier for enhanced performance. (Open Source)

Sentiment Analysis & Recommendation: Python, Scikit-learn, Tensorflow

Sentiment Classifier to analyze and predict the sentiment of user reviews collected from 1 million Google Play Store entries.

CERTIFICATIONS

- Build SLM from Scratch – Vizuara Technologies
- Hand-on approach to AI for real-world application (AI4ICPS Cohort 2) – IIT Kharagpur AI4ICPS
- Introduction to Natural Language Processing – NPTEL
- Cyber Security Fundamentals – University of London