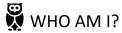
# SHILADITYA SARKAR

Post Graduate Research Scholar



I am a mathematics enthusiast, with an unbound interest in Large Language Models - their applications, loopholes and security. I open source my findings and explain concepts here: https://medium.com/@writetoshiladitya



### **Robotics and Automation Instructor**

Openhouse, Kolkata. 01/2023 - 06/2023

- Teaching fundamentals of Coding, Mechanics, and Electricity.
- Specializing in the development of Automated Machines.
- **Youngest Manager** of the entire Robotics Course, Theatre Road main branch.

## **International Coding Instructor**

CampK12, California (Remote). 06/2022 - 06/2023

- Training senior grade students from the UK and US in Computer Science.
- Specializing in Artificial Intelligence, Machine Learning, Game Development, and Web Design.
- Youngest Employee awarded with Certificate of Excellence (5/5 stars) for training new faculties and achieving the highest customer conversion rate consistently.

#### **Research Fellow**

Indian Institute of Technology (IIT), Bombay. 11/2021 - 07/2022

- **Head of the team** and **lead contributor** towards the creation and deployment of the age-appropriate and thematic blueprint of model **BloomScope**.



#### **ChatEXCEL** present

Chat with your excel/csv/json files with ease in Natural Language or Voice commands.

 Powered by Google Gemini Pro and Langchain, now create, manage, and talk to databases just by text or voice commands.

# Preach 03/2024

Generate PPTs from Multimodal Inputs (any Video, Audio or Text).

 Awarded First position and 350 USD prize money in Intel OneAPI Hackathon 2024 (Generative AI) for project Preach.

## MysticML 01/2024

Python library that automates data preprocessing pipeline for downstream tasks.

- Author and manager of Python library mysticML.
- Provides the **most advanced preprocessing** not provided by any other library.

#### LayerFX 12/2023

Fastest Image Steganography using Java.

- **Novel image encryption technique** used to create **adversaries for neural networks** as part of my research.



Getting started with Large Language Models (LLMs) – Skillsoft.

Introduction to **Statistics** – Stanford University.

Natural Language Processing for Developers – Infosys.

Introduction to **Programming** – University of Edinburgh.

- Awarded Gold Badge in HackerRank's 30 Days of Code challenge.
- Secured 100/100 in Computer Science, ICSE 2018.
- Secured All India Rank 219 by clearing SSB interview after passing NDA.



MSc. Artificial Intelligence and Machine Learning, Christ University 07/2023 - 04/2025 *Bengaluru, Karnataka.* 

- First in class with a CGPA of 3.98 out of 4.
- **Elected** as the **Editor** followed by **Chief Editor** (current) of Computer Science magazine Infobahn.
- Automated attrition insights for Christ University Employee records (all campuses) 2020-24.
- Developed an Inter-document Plagiarism checker that beats online plagiarism checkers.
- Developed a technique to get spam score and beat spam filters by automatic intelligent suggestions to send mass mails for Christ University.
- **Single-handedly developed a model** for the **Department of Psychology** to **automatically identify** which interviewees **actually** know about AI as opposed to what they say.

BSc. Computer Science, St. Xavier's College (Autonomous) 01/2021 - 06/2023 *Kolkata, West Bengal.* 

- **First to solve the NP-complete Independent Set problem**. Proof was selected and published in the college faculty magazine.
- Published article the Mathematics behind Behavioral Psychology, at Annual Science Magazine Xavier's.
- Developed a novel algorithm for the quickest Raster to Vector data conversion without the requirement of any thinning.
- Discovered a unique state for Conway's Game of Life selected and published at the Annual Technical magazine X-Cryptus 2022.
- Proved the Four Color Theorem from Graph Theory.
- Elected as the Lead of Systems for the Annual Technical Fest of St. Xavier's 2022.
- **Elected** as the **Editor** of the magazine of the Department of Computer Science 2022.
- Elected to Class Coordinator 2021-22.

# Ç■LANGUAGES KNOWN

ENGLISH - Native, C2 (IELTS 8.5 certified).

GERMAN - Intermediate (Goethe Zertifikat).

**HINDI, BENGALI** – Native.