

EDUCATION	
Techno Main Salt Lake	Kolkata, West Bengal
Bachelor Of Technology Computer Science and Technology (AI ML); GPA: 7.7	Sept 2023- Jun 2026
The Calcutta Technical School	Kolkata, West Bengal
Diploma Engineering in Computer Science and Technology; CGPA: 8.9	Jun 2020- Jun 2023

SKILLS	
Languages :	Python, Java, C, SQL, CSS
Frameworks :	Flask, Tensorflow ,Pytorch
Platforms :	Jupyter Notebook , Pycharm professional, Visual Studio Code, Github, Kaggle ,Hugging-Face
Tools :	MongoDB , Firebase , Streamlit
Libraries:	pandas, NumPy, scikit-learn
Spoken Languages:	English , Hindi , Bengali

PROJECTS	
GAN-based Image Colorization Model ( <a href="#">Link</a> )	Aug 2024- Sep 2024
<ul style="list-style-type: none"><li>Implemented a Deep learning model, GAN (Generative Adversarial Network) using a U-Net architecture for the generator and a discriminator to colorize grayscale SAR images.</li><li>Achieved <b>90%</b> accuracy on <b>1000</b> test images with the model trained over <b>300</b> epochs.</li><li>Utilized TensorFlow to build and optimize the model, the generator and discriminator, and loss functions to enhance colorization performance, improving inference speed by <b>20%</b>.</li><li>Resolved challenges like axis misalignment during convolutional operations and improved generator stability across training cycles <b>30%</b>.</li></ul>	
Home Automation ( <a href="#">Link</a> )	Aug 2022- Jun 2023
<ul style="list-style-type: none"><li>Developed a home automation system controlling <b>3</b> fans, <b>5</b> lights, and <b>2</b> other appliances using Arduino Uno R3 and ESP-01 module.</li><li>Synchronized the system with a mobile app (RemoteXYZ) for real-time control, achieving <b>100%</b> wireless connectivity using the Wi-Fi communication protocol.</li><li>Overcame challenges in establishing seamless communication between Arduino and ESP-01, reducing connectivity downtime by <b>30%</b>.</li></ul>	
Invoice Processing with Generative AI ( <a href="#">Link</a> )	Mar 2024 - April 2024
<ul style="list-style-type: none"><li>Spearheaded the development of a cutting-edge Streamlit tool that embodied Google Generative AI's Gemini-Pro-Vision model API <b>2x</b> faster.</li><li>Allowing users to input prompts and invoice images for streamlined information extraction, leading to a <b>50%</b> increase in accuracy.</li></ul>	
Q&A ChatBot with Generative AI ( <a href="#">Link</a> )	Jan 2024 – Feb 2024
<ul style="list-style-type: none"><li>Built a real-time Q&amp;A chatbot using Streamlit and Google Gemini Pro API, handling 100+ user queries with <b>90%</b> response accuracy.</li><li>Integrated session-based chat history and optimized response time to under <b>2</b> seconds per query.</li><li>Secured API key management using environment variables for scalable deployment.</li></ul>	

EXPERIENCE	
AI/ML Virtual Internship India: Edu Program with Google Developers ( <a href="#">Link</a> )	April 2024 – Jun 2024
<ul style="list-style-type: none"><li>Completed a 10-week AI-ML Virtual Internship, gaining hands-on experience with AI and machine learning tools.</li><li>Collaborated on projects under the guidance of experts from NEAT, AICTE, and EduSkills.</li><li>Developed an object detection model inspired by Google Lens, improving object recognition accuracy by <b>10-15%</b> through the implementation of CNN-based architectures.</li></ul>	

CREDENTIALS	
<ul style="list-style-type: none"><li>Solved around <b>150+</b> coding questions in <a href="#">Leetcode</a></li><li>Participated in the Google Developer Groups Workshop at Kshitij 2024, IIT Kharagpur, and gained real-world experience with Google developer tools and technologies.</li><li>Earned certificates from <a href="#">Udemy</a>, <a href="#">GreatLearning</a> and <a href="#">Ec-Council</a>.</li></ul>	