SAMIDDHO CHATTERJEE

Kolkata, West Bengal
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Profile Summary

- Proven ability in leadership as have managed portfolios of different clubs.
- Proficient in circuit analysis, analog circuits, microwave RF circuit designing.
- Interest in Business analytics, Marketing Management as well as Artificial Intelligence and Machine Learning and Internet of Things .

Relevant Coursework

- Circuit Theory
- Analog Circuits
- Electromagnetic Field Theory and Antenna Design
- Communication Systems
- Internet of Things
- Artificial Intelligence and Machine Learning
- Marketing Management
- Business Analytics

Experience

Maven Silicon – AHB to APB bridge design (Certification) Certification 1, Certification 2. *August 2023 – October 2023*

- Developed an AHB to APB bridge using Verilog, optimizing performance and area with ModelSim Design Compiler and Quartus Prime Intel FPGA Simulator.

Projects

Li-Fi Technology — *Hardware Model* —Video *April 2023 – July 2023*

- Designed and implemented a data transmission system using light as a medium for faster and more efficient data transfer, integrating encoding and decoding techniques to enable transmission. Evaluated audio streaming quality, observing that the distance between the decoder's solar panel and the light source impacts data quality, and collaborated with my peers to successfully complete this mini project.

Optical Character Recognition — *Python* — Screen Recording *Jan 2024*

- Designed and developed a model capable of reading images, extracting text, and accurately identifying specific words along with their frequency of occurrence. The model leverages optical character recognition (OCR) techniques to process and analyze text within images, ensuring precise word detection and count. This solution can be applied to automate text analysis tasks, improving efficiency in scenarios requiring word recognition and frequency analysis.

SAR image processing using Deep Learning — *Python* — *Dec 2024 – ongoing*

- Developing a robust deep learning-based algorithm for real-time landslide detection and mapping using Synthetic Aperture Radar (SAR) data.

Technical Skills

Analytical Tools: Ansys HFSS, LT Spice, Keil Microvision, MATLAB and Simulink, ModelSim, Colab
Languages: C, C++, Java, Python

Education

Vellore Institute of Technology, Chennai *2021 – 2025*
Bachelor of Technology (ECE) – CGPA: 8.23