Aviroop Mitra

aviroopmitra5@gmail.com | +91 79809 58951 | Kolkata, West Bengal,

PROFESSIONAL EXPERIENCE

Machine Learning Intern at Neurologic-ai

Nov, 2023 - Present

• Intelligent Claim Orchestration in Guideware - Skan AI | May-Jun 2025

• Automated claim creation and assignment in Guidewire ClaimCenter with a vision-to-reasoning pipeline that pairs GPT-4 Vision/Text (async Python, prompt-engineered with token-cost guardrails) and a hierarchical scorer operating on a 30-event window. Delivered 80 % confidence (+23 pts over benchmark) and halved inference latency.

• Document Intelligence Platform - Carelon Health | Mar-May 2025

• Streamlit-based interface drives a PDF-to-image flow where a layout-transformer isolates semantic zones; cropped sections are passed to async GPT-4 Vision (backed by Mistral OCR and Python imaging) and rendered with Pandas. The generalized architecture now ingests diverse healthcare documents and keeps end-to-end latency under 3 s without sacrificing accuracy.

Advisory Intern at PwC India

Jun - Jul, 2024

• Full-Stack Ticket Platform | Jun-Jul 2024

• Angular + Spring Boot + MongoDB stack with JWT-secured role-based access. Provides a real-time ticket dashboard, template creation/search, appraisal & query threads, and an animated UI-while keeping CRUD latency under 50 ms. An API Gateway and client-side service discovery route traffic to horizontally duplicated ticket and auth services for effortless scale-out.

EDUCATION

Bachelor of Engineering - BE in Computer Science and Engineering • Jadavpur University

Dec, 2021 - Jul, 2025

GPA: 8.15 (upto 7th semester)

Higher Secondary in Science • Burdwan Municipal High School

Jul, 2019 - Mar, 2021

GPA: O

Secondary • Burdwan Town School

Jan, 2011 - Mar, 2019

GPA: AA

PROJECTS

Distributed P2P Network

Feb - May, 2025

Built a simulation of P2P network using FastAPI, Streamlit and Distributed Computing knowledge where peers can upload and view files (similar to Bit torrent)

• Built a simulation of P2P network using FastAPI, Streamlit and Distributed Computing knowledge where peers can upload and view files (similar to Bit torrent)

Compiler Design Project

Feb - Apr, 2024

* Implemented a bottom up parser in C language for a simple C like language with for loops, variable declarations and functions * Designed an LR(1) automaton to generate parsing tables and handle grammar rules for a C-like language. * Integrated a lexical analyzer and symbol table to tokenize input, manage scope, and validate identifiers and types during parsing.

• Implemented a bottom up parser in C language for a simple C like language with for loops, variable

• declarations and functions

• Designed an LR(1) automaton to generate parsing tables and handle grammar rules for a C-like language.

• Integrated a lexical analyzer and symbol table to tokenize input, manage scope, and validate identifiers and types during parsing.

LinkedIn Puzzle Solver

Aug - Aug, 2024

* Developed a Streamlit-based web application to solve the Queens game, a logic puzzle from LinkedIn News. * Created a user-friendly interface with custom styling using HTML and CSS for enhanced visual appeal. * Integrated image processing using the Python PIL library to guide users on valid and invalid image uploads.

• Developed a Streamlit-based web application to solve the Queens game, a logic puzzle from LinkedIn News.

• Created a user-friendly interface with custom styling using HTML and CSS for enhanced visual appeal.

• Integrated image processing using the Python PIL library to guide users on valid and invalid image uploads.

SKILLS

APIs & Integration:

OpenAI API, REST APIs

Machine Learning & Data Science:

Machine Learning, Recommender Systems, Transformers, Deep Learning, Scikit-Learn, NumPy

Programming Languages:

C++, JavaScript, Java

Databases & Backend:

MySQL, SQLAlchemy, MongoDB, SQL

Web Development & Frameworks:

Streamlit, FastAPI, Spring Boot, Angular, Node.js

Cloud & DevOps:

Cloud Computing, Git

Testing & Quality Assurance:

pytest

Computer Science Fundamentals:

Data Structures, Algorithms

AWARDS & ACHIEVEMENTS

GATE CS, 2025

Feb, 2025

AIR 65, 99.96 percentile

Jagadish Bose National Science Talent Search, Senior Scholar

Jul, 2022

98.98 percentile

Jagadish Bose National Science Talent Search, Junior Scholar

Mar, 2020

98.5 percentile

CERTIFICATIONS

Programming in java • NPTEL

Nov, 2023

PERCEPTRON - The Turing Show, Coding Competition • RKMVERI, Belur

Jan, 2023