

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 - Skan AI <-> Guidewire | 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 (\wedge 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

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)

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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.

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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.

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SKILLS

Programming Languages:

C++, Java, JavaScript, SQL

Machine Learning & Data Science:

Machine Learning, Deep Learning, Recommender Systems, Transformers, Scikit-Learn, OpenAI API

Web & API Development:

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

Databases & Data Management:

MySQL, MongoDB, SQLAlchemy

Cloud & Distributed Computing:

Cloud Computing, Distributed Computing

Tools & Testing:

Git, pytest, Jupyter

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