

# 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 (^ 23 pts over benchmark) and halved inference latency.
- Document Intelligence Platform - Caredon 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**

### **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

### **Jagdish Bose National Science Talent Search, Senior Scholar • Jul, 2022**

98.98 percentile

### **Jagdish 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**