# **Aviroop Mitra**

aviroopmitra5@gmail.com | +91 79809 58951 | India | LinkedIn

## PROFESSIONAL EXPERIENCE

## **Neurologic-ai** | Machine Learning Intern

Nov, 2023 – Jul, 2025

- 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.

## PwC India | Advisory Intern

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**

**Burdwan Municipal High School | Higher Secondary in Science |** *GPA: O* 

Jul, 2019 - Mar, 2021

Burdwan Town School | Secondary | GPA: AA

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)

#### **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.

#### 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.

#### SKILLS

**Programming Languages:** C++, JavaScript, Java

Algorithms & Data Structures: DSA Databases: MySQL, MongoDB, SQL

Web & API Development: OpenAI API, Streamlit, REST APIs, FastAPI, Spring Boot, Angular, Node.js

Machine Learning & Data Science: Machine Learning, Recommender Systems, Transformers, Deep Learning, Scikit-Learn, NumPy

DevOps & Infrastructure: Distributed Computing, Cloud Computing

**Testing & Version Control:** pytest, Git

## **AWARDS & ACHIEVEMENTS**

GATE CS, 2025 | AIR 65, 99.96 percentile

Senior Scholar | Jagadish Bose National Science Talent Search | 98.98 percentile

Jul, 2022

**Junior Scholar** | **Jagadish Bose National Science Talent Search** | 98.5 percentile Mar, 2020