# **Aviroop Mitra**

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#### 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**

Jadavpur University | Bachelor of Engineering - BE in Computer Science and Engineering | Dec, 2021 - Jul, 2025

GPA: 8.15 (upto 7th semester)

Burdwan Municipal High School | Higher Secondary in Science | Jul, 2019 - Mar, 2021

GPA: O

Burdwan Town School | Secondary | 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)

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

Machine Learning & Data Science: Machine Learning, Recommender Systems, Transformers, Deep Learning

Data Science & Analytics: NumPy, Scikit-Learn, NumPy

Databases & Storage: MySQL, MongoDB, SQL

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

Cloud & DevOps: Cloud Computing, Git

Computer Science Fundamentals: Compilers, 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