

Aviroop Mitra

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Education

Jadavpur University

Bachelor of Engineering - BE in Computer Science and Engineering
Dec, 2021 – Jul, 2025 | CGPA: 8.15 (upto 7th semester)

Burdwan Municipal High School

Higher Secondary in Science
Jul, 2019 – Mar, 2021 | CGPA: O

Burdwan Town School

Secondary in
Jan, 2011 – Mar, 2019 | CGPA: AA

Work Experience

Neurologic-ai | Machine Learning Intern (Kolkata, West Bengal, India) | 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 — 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 (Kolkata, West Bengal, 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.
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Skills

- **Programming Languages:** C++, JavaScript, SQL, Java
 - **Databases & Data Stores:** MySQL, MongoDB
 - **Machine Learning & Data Science:** Machine Learning, Deep Learning, Recommender Systems, Transformers, Scikit-Learn, NumPy
 - **Frameworks & Libraries:** Spring Boot, FastAPI, Node.js, Angular, Streamlit, SQLAlchemy, pytest
 - **APIs & Integrations:** OpenAI API, REST APIs, API Gateways
 - **DevOps & Infrastructure:** Git, Cloud Computing
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Personal 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.
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Achievements

- **GATE CS, 2025** — *(Feb, 2025)*: AIR 65, 99.96 percentile
- **Jagadish Bose National Science Talent Search, Senior Scholar** — JBNSTS *(Jul, 2022)*: 98.98 percentile
- **Jagadish Bose National Science Talent Search, Junior Scholar** — JBNSTS *(Mar, 2020)*: 98.5 percentile