

Professional Summary

Computer Science graduate with a strong academic foundation and hands-on experience in backend development, machine learning, and distributed systems. Passionate about building scalable solutions and optimizing performance through clean, efficient code. Adept at problem-solving and collaborating in team environments. Eager to contribute technical skills and innovative thinking to impactful projects.

Education

Jadavpur University | Bachelors of Engineering in Computer Science & Engineering

November 2021 - June 2025, tentative | **CGPA: 8.16 (Until 7th Semester)**

Key Subjects: Data Structures & Algorithms, Database Management Systems, Object Oriented Programming, Compiler Design, Machine Learning, Artificial Intelligence, Computer Networks, Operating System, Graph Theory & Combinatorics, Computer Architecture & Organization, Distributed Computing.

Work Experience

PricewaterhouseCoopers LLP | Advisory Intern, Kolkata (Onsite) | May - July 2024

Service Requestor: A Full-Stack Web Application | May - July 2024

- Designed and implemented a service requestor platform using **Angular** for the frontend and **Spring Boot** for the backend, leveraging RESTful APIs and microservices architecture.
- Built and integrated multiple microservices, including **service discovery (Netflix Eureka)**, an API gateway with circuit-breaking patterns, and dynamic caching to optimize request handling.
- Utilized **MongoDB** for flexible, schema-less data storage and implemented **AG-Grid** for interactive data visualization, enhancing user experience and efficiency.

NeurologicAI | Machine Learning Intern, Hyderabad (Remote) | Nov 2023 - March 2025

Backend Migration of Recommender Engine | February - March 2025

- Migrated a recommendation engine backend from **Spring Boot (Java)** to **FastAPI (Python)**, improving scalability and efficiency.
- Implemented **SQLAlchemy** for database handling and leveraged **Azure** for managing 20+ schemas.
- **Managed 10x more traffic seamlessly.**

Optimal Number of Agents forecasting for a call center | June - August 2024

- Optimized forecasting pipeline by addressing edge cases such as holidays, weather anomalies, and socio-political events.
- Fine-tuned SOTA models (**FBProphet**) and in-house forecasting models, achieving **<2% deviation** in predictions.

Resume Extractor | November 2023 - January 2024

- Engineered a pipeline to extract structured information from diverse resume formats, achieving **95% accuracy**
- Resolved edge cases like misidentification of project dates and candidate age parsing.

Skills

- **Machine Learning & Data Science:** Time Series Analysis, LLM Fine-tuning, Computer Vision
- **Software Development:** Microservices, Cloud Deployment, Software Testing
- **Databases & Backend:** SQLAlchemy, Amazon S3, Azure, REST APIs, MySQL, MongoDB
- **Programming Language:** Python, C, C++, Java, Javascript

Personal Projects

Distributed P2P Network, February - March 2025 | Github

- Built a **scalable peer-to-peer text processing system** with three types of nodes (Main, Data, Compute) for distributed text processing, semantic search, and real-time node management.
- Developed **health monitoring, dynamic task distribution, and data persistence mechanisms** to ensure system reliability and efficient resource utilization.
- Leveraged **Python, FastAPI, pytest** for testing, and **RESTful APIs** for communication, adhering to PEP 8 standards and using **CI/CD workflows** for robust development.

LinkedIn Puzzle Solver, August 2024 | Github | App

- 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.

Compiler Design Project, April 2024 | Github

- 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.

Achievements

- **GATE CS 2025** | **AIR 65**, Score : 903/1000
- **JBNSTS Senior Scholar 2021** | 98.98 percentile
- **JBNSTS Junior Scholar 2019** | 98.5 percentile