Sourish Chandra

Education

Indian Institute of Information Technology, Kalyani

Expected May 2026

Bachelor of Technology in Computer Science and Engineering (CGPA: 8.48)

Kalyani, West Bengal

• Relevant Coursework: Data Structures and Algorithms (C++), Probability and Statistics (Python), Linear Algebra, Discrete Mathematics, Operating Systems, Compiler Design, Artificial Intelligence, Machine Learning, Computer Networks, Database Management System, Cryptography and Network Security

Experience

Indian Institute of Information Technology, Kalyani

June 2025 - July 2025

Research Intern

Kalyani, West Bengal

- Worked on the design and implementation of a **custom cryptographic signature scheme** in **C**, focusing on efficiency and security.
- Developed detailed **technical documentation** explaining the scheme's mathematical foundation, implementation details, and use cases.
- Published the project and documentation on GitHub, ensuring reproducibility, clarity, and accessibility for future researchers.
- Collaborated with peers and mentors to **review**, **test**, **and refine** the proposed scheme, strengthening problem-solving and research skills.

Projects

MoviesNow | React, Django, Redis, Celery, TypeScript

- Implemented JWT-based authentication with support for both Google login and email-password login.
- Built a social movie streaming platform with synchronized playback and real-time video meetings.
- Developed scalable Django REST APIs for movie uploads, metadata, and reviews.
- Integrated Django Channels and LiveKit for chat, meetings, and notifications.
- Implemented HLS streaming and background media processing with Celery and Redis.
- Designed modern React interfaces for movie discovery and staff moderation.

SJ-Website | React, TypeScript, Tailwind CSS, Django, PostgreSQL, AuthO

- Built a full-stack jewelry e-commerce application with dynamic product catalogs and user profiles.
- Designed a responsive UI using React, TypeScript, Vite, and Tailwind CSS.
- Developed Django APIs for roles, profiles, and product management.
- Integrated AuthO for secure authentication and role-based access control.
- Used Swagger for API documentation and testing.
- Deployed using Vercel (frontend), Render (backend), Cloudinary (media), and Aiven (PostgreSQL).
- Live Demo

MeowAPI | Python, WSGI, SQLite, Jinja2

- Developed a minimalist Python web framework supporting both function- and class-based routing with middleware.
- Implemented SQLite-based route persistence with emoji-enhanced developer logs.
- Added JSON/HTML helpers, dynamic route parameters, and Jinja2 templating.
- Created a cat-themed homepage with static file serving.
- Planned ASGI support for improved scalability.

Technical Skills

Languages: Python, TypeScript, JavaScript, SQL, HTML, CSS, C, C++, Assembly

Frameworks / Libraries: React.js, Django, Django REST Framework, Celery, Redis, LiveKit, Tailwind CSS, Vite, Jinja2,

WebSocket, SQLite, PostgreSQL

Tools / Platforms: Auth0, Swagger, Git, GitHub, Gunicorn, Vercel, Render

Concepts: RESTful API Design, Microservices, Real-time Communication, Middleware, Authentication & Authorization,

Role-Based Access Control, Templating, Background Task Processing, API Documentation, Agile Development