



SHREHAN RAJ SINGH | 24CE10103

Indian Institute of Technology Kharagpur



EDUCATION

| Year | Degree/Exam | Institute | CGPA/Percentage |
|------|---------------------------|--|-----------------|
| 2023 | B.Tech, Civil Engineering | Indian Institute of Technology Kharagpur | 8.68 |
| 2019 | Class XII, CBSE | Hem Sheela Model School, Durgapur | 94.2% |
| 2017 | Class X, CBSE | Hem Sheela Model School, Durgapur | 97% |

INTERNSHIPS AND PROJECTS

Financial Intelligence Platform Inter IIT Tech Meet 14.0 Oct '25 - Dec '25

- Built an AI-powered financial intelligence platform for real-time market analysis and research across **NASDAQ and S&P 500** companies.
- Trained and deployed **AI agents and conversational chatbots** backed by proprietary data with **strict guardrails** for safety and relevance.
- Built a **RAG-based World Data Model** over alternative data and SEC filings to enable context-aware financial querying.
- Ranked second in the problem statement and gold overall.
- Technology stack: Python, LangChain, LangGraph, Pathway, Next.js, FastAPI, HuggingFace, Modal, Kafka, Docker

Interpreted Programming Language Self Project May '25 - Present

- Designed and implemented a **thread-safe interpreted programming language** with support for functions, loops, conditionals, and exception handling.
- Built a **modular runtime and interpreter** supporting user-defined modules, classes, and **single/multiple inheritance**.
- Link to repository is <https://github.com/shrehanrajsingh/sunflower-cpp>
- Technology stack: C++, C

Employee Health Detection General Championship Mar '25 - Apr '25

- Built an **AI-driven employee engagement system** leveraging **chatbots and sentiment analysis** to extract insights from employee conversations.
- Technical stack: Python, PostgreSQL, Docker, SQLAlchemy, React, Node.js, Modal.

Blockchain Simulator Jun '25 - Jul '25

- Designed and implemented a **local blockchain simulation framework** to model decentralized networks in a controlled environment.
- Implemented a **Proof-of-Work (PoW) consensus mechanism** including block validation and chain extension logic.

SKILLS AND EXPERTISE

- **Programming Languages:** Python, C++, C, JavaScript, Rust, SQL
- **Frameworks and Libraries:** LangGraph, LangChain, Next.js, React, Docker, FastAPI

COURSEWORK INFORMATION

- | | |
|---|---|
| ○ Programming and Data Structures - EX | ○ Programming and Data Structures Laboratory - EX |
| ○ Advanced Calculus - EX | ○ Internet of Things in Civil Engineering - EX |
| ○ Fundamentals of Embedded Computing and Software - A | ○ Algorithm Laboratory - A |

POSITIONS OF RESPONSIBILITY

Student Volunteer | Induction Team 2025 May'20 - July'21

- Guided and mentored **freshmen** students in acclimatizing to the environment of the institute.
- Conducted bus tours to freshmen students showing them around the campus.

AWARDS AND ACHIEVEMENTS

- Secured a rank of 349 in WBJEE, out of 1,50,000 candidates.