

Professional Summary

Analytically driven Electronics & Telecommunication Engineering student with hands-on experience in full-stack web development (React, TypeScript), Python, SQL, and data structures & algorithms, complemented by research exposure to advanced computational methods and protocol design at IISc Bangalore. Skilled at breaking down complex, unstructured problems into structured, implementable software solutions, with a growth mindset oriented toward continuous learning of new tools and frameworks. Seeking to apply strong problem-solving, coding, and engineering rigor as a Software Engineer.

Education

- 2023–Present **B.E. in Electronics and Telecommunication Engineering**, *Jadavpur University*, Kolkata, India
2023 **AISSE (PCM)**, *DAV Public School*, Raniganj, India, GPA: 94%
2021 **AISSE**, *DAV Public School*, Raniganj, India, GPA: 96%

Technical Skills

Languages	C, C++, Python, JavaScript, TypeScript
Web & App Development	React, HTML, CSS, Vite, MUI, REST APIs, Progressive Web Apps (PWA), IndexedDB
Data & Analytics	SQL, DBMS, Data Structures & Algorithms, Statistical/Analytical Problem-Solving
Digital Design	Verilog HDL, Digital & Analog Circuit Design, Computer Architecture
Tools & Platforms	Git, GitHub, Vercel, Vivado, Multisim, CircuitMaker, LaTeX
Additional	Cryptography & Secure Multi-Party Computation Fundamentals, Machine Learning Concepts
AI Tools	Leveraged AI-assisted development tools to accelerate coding, debugging, documentation, and workflow automation, improving overall development efficiency.

Experience

- Jun 2026–Jul 2026 **Research Intern**, *CRIS Lab, Indian Institute of Science (IISc)*, Bangalore, India
- Analyzed security models and protocol design principles for secure multi-party computation (MPC) systems under Prof. Arpita Patra, applying rigorous analytical frameworks to complex, unstructured research problems.
 - Reviewed and summarized [X] cryptography research papers, translating theoretical protocols into structured, implementable concepts – applying advanced computational/algorithmic reasoning to real-world design constraints.
 - Collaborated cross-functionally with PhD scholars and research associates in an active research group, aligning technical findings with broader project goals.
 - Selected by faculty supervisor for invitation to Google Security Engineering Center (GSEC) India Research Day based on internship performance and analytical contribution.

Projects

Expense Manager – Local-First PWA, *GitHub Repository*

- Built a full-featured, installable Progressive Web App for personal and group expense tracking using React 18, TypeScript, and MUI v5, with an offline-first architecture backed by IndexedDB.
- Implemented group expense splitting, recurring/budgeted expenses, and a guided onboarding tour; engineered secure Google Drive cloud backup with client-side AES-256-GCM encryption.
- Diagnosed and resolved a Vite/MUI toolchain incompatibility and deployed the application on Vercel with a documented, CI/CD-ready GitHub workflow.

Achievements

- Invited to Google Security Engineering Center (GSEC) India Research Day, Google Ananta, Bangalore (Jul 2026), engaging with Google researchers and academic leaders on AI safety, privacy, and cybersecurity.
- Scored 94% in AISSE (PCM) and 96% in AISSE board examinations.
- Achieved 95 percentile in JEE Mains; secured Rank 962 in WBJEE.
- Led a 10-member team as Event Lead for Srijan (JUGS); awarded “Most Dedicated Volunteer.”
- Reached Top 24 nationally in India’s Future Tycoons Season 3 (ENPOWER).