

TAMAGHNA DEY



DETAILS

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🌐 [Visit my website](#)

📍 Kolkata, India, 700110

SKILLS

- NMR, ATR, FRET Spectroscopy and Interferometry
- Shell scripting, DSA in C, python, java
- LAMMPS, GROMACS, Ambertools
- Web and App Development
- Image Processing (OpenCV)
- Neural Networks and ML/AI
- Multivariate & Vector Calculus and Real Analysis
- Fourier Optics and Fourier Analysis
- FOSS Systems, Git and advanced version control
- \LaTeX , Regex

SUMMARY

My primary interests lie in applied computer science, physical chemistry, statistics, and anything that bridges theory and experimentation. I am interested in working with molecular dynamics simulations, time-resolved spectroscopy, genomics, and related large-scale datasets — applying sophisticated statistical, machine learning, and deep learning methodologies for prediction and modelling.

I am deeply interested in computational logic, mainly algorithm formulation, automated workflows, and information and graph theory.

PROJECTS

- **Insight Development using Expo Dev Client** [Github-Insight](#)
- **TATTVA'26 Website Development using Astro-JS** [tattva-website.pages.dev](#)
- **Analog Image Processing via 4f Correlator System** (Supervised by Dr. S. Goyal)
- **Technical Presentation to Education Minister of Punjab (National Science Day 2025)** Bridging Image Processing to Music Generation
- **School Exhibition (2019)** Self-Driving Obstacle Avoiding Car using Arduino Uno and L293D; Distant CFL Glow via Electrical Resonant Transformer

EXPERIENCE

Dec 2025 — Present

Convener

Turing Club, the Computation Club of IISER Mohali

Apr 2025 - Present

Project - iGEM

iGEM 2026 Participant — Team Member @ IISER Mohali

Oct 2025 - Present

Sports Coordinator

Table Tennis coordinator, IISER Mohali

Part-time

Full-stack Freelancing

Worked with Techs like Cloudflare, Netlify, Vercel, Sanity CMS, AstroJS

EDUCATION

2024 — 2029

BS-MS

Indian Institute of Science Education and Research, Mohali

Currently on my second semester with Chemistry and Physics Pre-major

2021 — 2023

XII Boards

Central Model School, Barrackpore, Kolkata — 700120

2013 — 2021

X Boards

St. Xavier's Institution, Panihati, Kolkata — 700114

CERTIFICATIONS AND LICENSES

- Co-founder of **ITERON** - An Online-based computational event on Evolutionary Game Theory.
- Metachem Academy LLP Certification — Molecular Dynamics simulations of polymer systems using GROMACS
- Ritvij Bharat Pvt. Ltd Certification — Deep Learning for AI: Mastering Neural Networks