

AYUSH SUKHADAN NAIR

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Education

Fr. C. Rodrigues Institute of Technology

Bachelor of Engineering in Information Technology

- CGPA: 9.55/10.0

Vashi, Navi Mumbai

2022 – 2026

Work Experience

IISER Mohali x TIFR

Project Intern

- Architecting silicon sensor modules for high-energy physics experiments with **3 team members**.
- Automating validation of **500 sensor wire bonds** using **ML models** and high-resolution scanner images.

Mohali, Punjab

June 2025 – Present

Sports Mentoring Infusion - NGO

Remote

Backend + Analytics Developer

- Developing production-grade application with **base authentication system** and **all core modules** implemented.
- Building platform architecture to serve **150+ users** across **4 user roles** (admins, students, coaches, volunteers).
- Implementing communication workflows to reduce manual coordination time by **70%** for **10+ coaches**.

June 2025 – July 2025

IISER Mohali

Project Intern

- Engineered fall detection system using **YOLOv8-OBB + MediaPipe**, reducing false positives by **60%**.
- Created healthcare solution for **live monitoring and feedback** for immediate response.

Mohali, Punjab

July 2024 – June 2025

Fr. Conceicao Rodrigues Institute of Technology

Developer Intern

- Optimized college portal serving **1,000+** users with enhanced performance and functionality.
- Built **information management system** for managing college data and information.

Vashi, Navi Mumbai

July 2023 – June 2024

Projects

Delta Investments | MERN Stack, AI Integration

2024

- Architected investment platform with **real-time stock data** and **Gemini AI** integration.
- Implemented **auto trading feature** with AI-powered market analysis and risk management.

VaniConnect: Sign Language Transcriber | Python, Computer Vision

2024

- Constructed real-time gesture translation system with **85% accuracy** across **200+ sign patterns** for both **Indian and American sign languages**.
- Won **1st place** in Summer Project Competition among **60+ participants**.

Expense Ease | Java, JavaFX, MySQL

2023

- Developed comprehensive expense tracking application with **CRUD operations** for transactions, savings, and budget management.
- Integrated **data visualization** with pie and bar charts for category-wise spending analysis and budget alerts.
- Built **borrow/lend tracking system** with automated due date reminders and user-friendly JavaFX interface.

Open Source Contribution Tracker | React, Node.js, MongoDB

2024

- Developed analytics platform to provide analysis and tracking for **20+ GitHub repositories**.
- Enabled users to view details of their open-source contributions and generate shareable links to showcase them on platforms like LinkedIn.

Achievements & Leadership

GirlScript Summer of Code (GSSOC'25)

Open Source Program

2025

Selected Contributor

- Contributed to **AlgoVisualizer project** by adding **custom array input feature** for sorting and searching techniques.
- Enhanced **frontend design** of documentation page, improving user experience and accessibility.

HackQuinox 2024 - CSI FCRIT

Mumbai, India

2024

Top 5 Finalist

Smart India Hackathon

Government of India

2024

Internal Round Qualifier

Computer Society of India - IT Department

FCRIT

2023

Treasurer

- Handled finance for CSI-IT events, managing budgets up to **INR 30,000** with sponsorship incentives.

Technical Skills

Languages: Python, Java, JavaScript, SQL

Frontend: React, HTML/CSS, JavaScript

Backend: Node.js, Express, MongoDB

ML/AI: TensorFlow, Scikit-learn, Computer Vision

Databases: MongoDB, MySQL, ChromaDB (Vector Database)

Tools: Docker, GitHub Actions