

Education

Indian Institute of Technology Dharwad

Dec 2022 – April 2026

B. Tech, Mathematics and Computing

CPI: 8.15/10.0

St. Xavier's Sr. Sec. School, Chandigarh

2022

Council for Indian School Certificate Examination(ICSE), New Delhi

Percentage: 95.4%

Relevant Coursework

- Data Structures and Algorithms
- AI/ML
- Software System Labs
- Operating System
- Computer Architecture
- DBMS
- Design Analysis of Algorithm
- Object Oriented Programming
- Computer Networks

Experience

Arista Networks

May 2025 – July 2025

Software Engineer Intern

Pune, India

- Developed and integrated a new **Client Connectivity Historical Data API** for Arista's **Digital Experience Monitoring (DEM)** dashboard in the CloudVision WiFi platform.
- Designed a **RESTful API** (Java Spring framework) to fetch and aggregate time-series data from **PostgreSQL**, enabling visualization of WiFi test results (latency, success rate, pass/fail) with dynamic filters (SSIDs, Sections).
- Built a **dynamic SQL query builder** to support efficient and modular query generation for various filtering and time-bucketing needs.
- Wrote **unit tests** using **JUnit** and **Mockito**, documented APIs (SDD), and contributed to integration testing for production readiness.
- Received a Pre-Placement Offer (PPO) based on outstanding performance and contributions.

RnD Project with Tejas Networks

Jan 2025 – April 2025

Research Intern under Prof. Nikhil Hegde – Python to MLIR Translation

Dharwad, India

- Contributed in building a compiler toolchain to automatically translate **Python/Numpy code into MLIR** using **ANTLR** and custom listener logic.
- Enabled translation of **np.fft.fftfreq()** into MLIR and linked it with native **C-based FFTW libraries** using **LLVM JIT**, significantly improving performance.
- Compared performance of NumPy, C, and MLIR+FFTW implementations: **MLIR+FFTW gave 2x speedup** over Python, combining abstraction and native performance.

Personal Projects

Canteen Food Ordering App | *ReactJS, ExpressJS, NodeJS, MongoDB with Stripe payment integration.*



- Features a **user-friendly frontend**, an **efficient admin panel**, and a **robust backend server**.
- Implemented **user registration and authentication**.
- Created a **shopping cart functionality** enabling users to add food items to their cart and place orders.
- Integrated **Stripe payment gateway** for seamless and secure online payments.
- Implemented features for **order status updates**, providing **real-time order tracking** for users.

Real-Time Bid War System | *Python, TCP Sockets, OpenCV, Threading*



- Built a real-time auction platform with live bidding, **video streaming using OpenCV**, and a responsive command-line interface.
- Used **TCP socket programming** for client-server communication; supported **multithreaded bid handling**, session control, and live updates.
- Implemented **host reassignment logic**, clients can request and seamlessly become host without interrupting auction.
- Engineered **live video broadcast from host** to all clients using OpenCV + socket protocol; optimized for low latency.
- Added integrated **text chat** and automatic timeouts.

Technical Skills

Languages: C, C++, Java, Go, Python, JavaScript, SQL, HTML/CSS.

Technologies/Frameworks: ReactJS, NodeJS, ExpressJS, Git, Spring framework.

Databases/Cloud: Elastic Search, Clickhouse, Hbase, PostgreSQL, MySQL, MongoDB.

Soft Skills: Teamwork, Communication, Problem Solving, Adaptability, Leadership.

Extracurricular/Achievements

- **Competitive Coding Wing Member of Coding Club, IIT Dharwad. Leetcode Rating: 1566 and Codeforces Rating: 1000.**
- Solved **350+** **DSA and CP** Problems on **Leetcode, Codeforces, GFG etc.** [Click here](#)
- Got **AP Grade**(awarded only to top 1% students) in **DSA Course** at IIT Dharwad.
- Served as **Outreach Coordinator** in the **Career Development Cell**, coordinating company outreach and handling HR communications.
- Selected as a **Student Mentor** under the **Student Mentorship Program**, guiding junior students academically and personally.