

Zeel Chotaliya

Adm. No. 21JE0269 📞 (+91)-926-572-7707 ✉ zeelchotaliya7@gmail.com [in](#) [Linkedin](#) [G](#) [Github](#) [P](#) [PortFolio](#)

Education

IIT (ISM) DHANBAD

B-Tech in Electronics & Communication Engineering (CGPA: 9.40 / 10.00)

Minor in Finance and Management (CGPA: 9.50 / 10.00)

Expected May 2025

Dec 2021 - May 2025

Aug 2023 - May 2025

- **Relevant Coursework:** Analog and Digital Communication, Wireless Communication, IoT, Computer Network, Satellite Communication, Finance Accounting and Reporting, Corporate Finance, Management of Banks and Finance.

Work Experience

Samsung | [Github Repository](#)

May 2024 – July 2024

Software Developer Intern

Bangalore, Karnataka

- Created SQLViz, a visualization tool that transforms complex SQL queries into graphical representations, cutting query analysis time by 70% and enhancing productivity.
- Architected a **Flask-based API** processing daily queries, incorporating **Python, Jinja, Graphviz, HTML, CSS, and JavaScript** to handle complex SQL statements up to 1000 lines long.
- **Tech Stacks:** - Python, SQL, FastAPI, Graphviz, Jinja Template

Indigo

June 2023 – Aug 2023

Data Analyst Intern

Remote

- Conducted extensive research on key performance indicators(KPI), utilizing **AIMS and JEPPESEN**, extracted strategic insights through a thorough comparative analysis, revealing nuanced possibilities for refining processes and optimizing performance.

Mentorship Experience:

Coding Ninjas- Mentor in Data Structures & Algorithm and Competitive Programming Course Nov 2022- Jan 2023, Part-Time,

Projects and Research

Performance Analysis of RIS assisted wireless Technology (6G)

On going

- Initiated research strategies for optimizing **RIS surface** placement and **multi-RIS configuration analysis** for efficient utilization and performance in dense city area.
- Implemented **MATLAB-based** simulation framework to evaluate single RIS communication scenarios.

Computer Network Implementation in C++

[Github-Link](#)

- Implemented **TCP/IP protocol layer** using C++.
- Written C++ code for **CRC-n Encoder and Decoder**.
- Implemented **Dijkstra** and **BellmanFord** Algorithm of Network using C++.
- Performed **Network Analysis** using **Wireshark Software**.

Seat Detecting System

[Github-Link](#)

- Engineered using **ESP32**, integrating **IR** and **load sensors** for enhanced accuracy and real-time monitoring.
- Implemented **WebSocket protocol** and **ThingSpeak cloud database** for seamless data transmission and storage.
- Developed client-side application for real-time occupancy tracking, enabling efficient seat management and monitoring.
- **Tech stack:** ReactJS, Websocket, ThinkSpeak.

Other Projects Links: [IoT Human-Following Vehicle](#)

[Shop Sphere: E-Commerce Platform](#)

[Layout](#)

[Design in Magic VLSI](#) [Auto-Connect: ISM Firewall](#)

Skills

Languages: C/C++, Python, JavaScript, Verilog HDL, System Languages.

Software Development: ReactJS, NextJS, FLask API, Bootstrap, HTML, CSS, SQL, MongoDB, Data Structures and Algorithms, Object Oriented Programming

AI/ML: Basics of Deep Learning (NN,CNN), NLP.

Tools: Git/Github, AWS, ThingSpeak, MATLAB, Figma.

Coding Profiles: [Codeforces \(Rating - 1400\)](#) [LeetCode \(Rating - 1600\)](#)

Achievements

CERTIFICATES

- Secured a **Bronze Medal** in **SOF IMO** (International Mathematical Olympiad).
- **Rank 1** in Hardware Electronics Challenge by ECE IoT Club.
- Solved **1000+** coding problems over different platforms.
- Demonstrated **academic excellence**, achieving a perfect **GPA of 10** in the fourth semester.

Social Engagements

Vice-President: Of Society of Electronics Engineering, IIT Dhanbad.

Chess-Club: Regular member of chess club of IIT Dhanbad.

Sports-Engagements: Badminton, chess, cricket and doing trekking.