

# Cebajel Tanan

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in cebajel-tanan-144695260    🌐 Cebajel

## Education

### Indian Institute of Technology Dharwad

Nov 2021 – May 2025

Bachelor of Technology in Computer Science and Engineering

**CGPA: 9.74/10**

Ranked 2<sup>nd</sup> in a class of 70 students.

**Coursework:** Data Structures and Algorithm, Computer Architecture, Artificial Intelligence, Linear Algebra, Discrete Structure, Mathematics for Data Science, Computer Networks, Design and Analysis of Algorithms, Operating Systems

## Experience

### Texas Instruments, Software Development Intern

May 2024 – July 2024

- Designed a python program which fetched information from Jira, Confluence and Klocwork servers and generated a report to analyze pending issues to be implemented.
- Optimized existing scripts used for analyzing issues in the development of projects at Texas Instruments from an average runtime of **8-10 hours** to **22-30 minutes**.
- Received a Pre-Placement Offer (PPO) based on outstanding performance and contributions.

Contact: Rajat Mehrotra ✉ [rajatm@ti.com](mailto:rajatm@ti.com)

### IP Analyzer, Cybersecurity Intern

May 2023 – Present

- Developed a web application capable of recognizing black listed IP addresses and domains along with relevant database where it is blacklisted and the reason.
- Designed application queries **150** grey list databases for evaluating host reputation.
- Used **MAD stack** for developing the application ensuring scalability, modularity and responsiveness.
- Hosted at [ipanalyzer.in](https://ipanalyzer.in) 🔗

Contact: Prof. Sameer Kulkarni ✉ [sameergk@iitgn.ac.in](mailto:sameergk@iitgn.ac.in)

### Automated Timetable Scheduler, Research Intern

Jan 2023 – Sept 2023

- Developed a framework capable of creating a timetable catering to needs of any institute considering all general constraints for students, professors, campus, venue capacity etc.
- Framework easily handles **16** different constraints on **100+ courses** and **6000+ registrations!**

Contact: Prof. Tamal Das ✉ [tamal@iitdh.ac.in](mailto:tamal@iitdh.ac.in)

### Bacterial Resistance Prediction, Data Science Intern

Jan 2023 – Nov 2024

- Used several ML models for analyzing Raman spectroscopy data from 3 bacterial strains.
- Developed an application which classifies bacterial resistance against Colistin with **97% accuracy** using Raman spectroscopy data.

Contact: Prof. Surya Pratap Singh ✉ [ssingh@iitdh.ac.in](mailto:ssingh@iitdh.ac.in)

## Skills

**Languages:** Python, C++, JavaScript, Typescript, C, Java, SQL, PHP

**Technologies:** MongoDB, Neo4J, Redis, Postgre SQL, My SQL, Django, Angular, Nginx, JIRA, Confluence, Klocwork, Orange3, Gurobi

**Topics:** Convolution Neural Networks, Recommender Systems, Deep Neural Networks, Machine Learning, Generative Adversarial Networks, Time Series Analysis, Constraint Satisfaction Problems, Multi-Objective Optimization

## Publications

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- Cebajel Tanan**, Sameer Kulkarni, Tamal Das and Manjesh Hanawal, “**A Multi-Functional Web Tool for Comprehensive Threat Detection Through IP Address Analysis**,” IEEE Conference on Engineering Informatics (ICEI), Dharwad, India. Nov 2024  
[icei2024.iitdh.ac.in/programs](http://icei2024.iitdh.ac.in/programs)
- Dimple Saikia, **Cebajel Tanan**, G. Dhananjaya, Basavraj Hungund, Nilkamal Mahanta, and Surya P. Singh. “**Validating phosphoethanolamine modification as a potential spectral marker of colistin resistance**.” Analyst (2024). Nov 2024  
[10.1039/D4AN01228C](https://doi.org/10.1039/D4AN01228C)
- Dimple Saikia, Arunsree Vijay, **Cebajel Tanan**, Surya P. Singh. “**Validating the utility of heavy water (Deuterium Oxide) as a potential Raman spectroscopic probe for identification of antibiotic resistance**.” Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 321 (2024): 124723. Nov 2024  
[10.1016/j.saa.2024.124723](https://doi.org/10.1016/j.saa.2024.124723)
- Dimple Saikia, **Cebajel Tanan**, G. Dhananjaya, Basavraj Hungund, Nilkamal Mahanta, and Surya P. Singh. “**Machine learning assisted Raman spectroscopy to discern the markers associated with colistin Resistance**.” (2024). Jun 2024  
[Link To Preprint](#)
- Cebajel Tanan**, Sameer Kulkarni, Tamal Das and Manjesh Hanawal, “**A Tool for Comprehensive IP Address Analysis**,” International Conference on COMMunication Systems & NETWORKS Demo. Nov 2024  
[Submitted](#)

## Certificates

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- Machine Learning Specialization – Completed 8 different courses Nov 2022 – Dec 2022  
[Google Cybersecurity](#) – Cybersecurity Course by Google May 2023 – July 2023  
[Google Cybersecurity Badge](#) – Badge awarded for completing Google Cybersecurity Course May 2023 – July 2023  
CERTIn Certificate – 12<sup>th</sup> Inter-IIT Tech Meet hosted by IIT Madras Dec 2023  
ICEI Certificate – Awarded for presenting paper and poster at IEEE Conference on Engineering Informatics (ICEI), Dharwad Nov 2024  
Indo-Finnish Joint Course Certificate – Awarded for delivering a lecture on significance of Game Theory in sustainable development at [Indo-Finnish Joint Course 2024](#) Nov 2024

## Achievements

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- Achieved **GPA 10** on a scale of 10 in **two consecutive semesters** in bachelors. Aug 2022 - April 2023  
Performed in **top 1%** Class XII Gujarat State Board examination. April 2020  
**Awarded Scholarship** for Higher Education (SHE) under Innovation in Science Pursuit for Inspired Research (INSPIRE) scheme  
Secured **3<sup>rd</sup> place** in lawn tennis at the **Khel Maha Kumbh** Gujarat. Oct 2017

## Extracurricular

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- Delivered a lecture** on significance of game theory on sustainable development at [Indo-Finnish Joint Course](#) held at IIT Dharwad. Sept 2024  
**Represented** IIT Dharwad at **12<sup>th</sup> Inter-IIT Tech Meet** hosted by IIT Madras. Dec 2023  
**Participated** in Inter Hostel General Championship 2022 in **lawn tennis**. Dec 2023