# Kaushik

Junior Undergraduate
Majors in Chemical Engineering
Minors in Computer Science and Engineering
Indian Institute of Technology, Gandhinagar



ACADEMIC DETAILS				
Degree	Specialization	Institute	Year	CGPA/%
B.Tech.	Chemical Engineering	Indian Institute of Technology, Gandhinagar	2022-Present	7.09
Class XII	Physics, Chemistry, Maths	DAV Public School, Delhi	2020-2021	81%
Class X		DAV Public School, Delhi	2018–2019	93.4%

#### **INTERNSHIP**

## • Software Developer Intern, Aubha Photonics Pvt. Ltd. Certificate

[May-Jun 2025]

- Designed and deployed a Python/OpenCV app for handheld spectrometer data acquisition, enabling real-time spectrum recording with image capture for 100+ samples.
- Engineered a drift correction algorithm, improving measurement precision by 15% ensuring robust calibration and reliable spectrum visualization.

### **PROJECTS**

#### • AI-Powered Resume Builder (LaTeX Automation)

[Aug-Oct 2025]

Development | Project Link

- Besigned and developed a resume generator that automates LaTeX formatting with AI support, helping students and professionals create professional, ATS-friendly resumes with ease.
- Integrated Python for section customization and content optimization, reducing creation time for users.
- Delivered a scalable, open-source tool that simplifies resume creation, improves formatting consistency, and enhances usability.

## • Peer-to-Peer & Creator Payment Platform

[Aug 2025–Ongoing]

Full-Stack Development | Project Link

- Developed a secure, real-time P2P payment platform for sending money to friends, family, or creators, supporting tipping, donations, and group payments.
- Implemented React.js, Next.js + Express, MongoDB, integrating Razorpay APIs, WebSockets, and JWT/AES for security and real-time updates.
- Delivered a scalable website featuring transaction history, social feed, group splits, and creator analytics, enhancing usability and engagement.

## • Human Activity Recognition (HAR)

[Aug-Sep 2024]

Advisor: Prof. Nipun Batra | ML | Project Link

- Executed a comprehensive Human Activity Recognition (HAR) project involving the prepro- cessing of accelerometer data and Exploratory Data Analysis techniques to enhance model accuracy / insights.
- Employed Python libraries such as Scikit-Learn for training decision tree models, TSFEL for extracting features from time-series data, and PCA for dimensionality reduction.
- Gained insights into model performance and feature importance, showcasing data preprocessing, feature extraction, and dimensionality reduction. This enhanced accuracy of the HAR models.

# • Classic Games Collection (C++)

[Sep-Nov 2023]

Advisor: Prof. Balagopal Komarath | DSA | Project Link

- Developed classic games such as a Sudoku solver, Tic-Tac-Toe using C++.
- Utilized a backtracking algorithm to efficiently solve Sudoku puzzles and created gameplay for Tic-Tac-Toe.

## **TECHNICAL SKILLS**

- Languages: C++, Python, JavaScript
- Web/Full-Stack: Next.js, React, Express, HTML/CSS
- Databases/Cloud: MongoDB, PostgreSQL, Vercel
- AI/ML: Scikit-learn, TensorFlow, NumPy, Pandas, OpenCV
- Tools: Git/GitHub, SQL, Matplotlib, Jupyter, MATLAB/Simulink

# POSITIONS OF RESPONSIBILITY

#### Coordinator, Hallabol IITGN

[Feb 2024]

 Organized footvolley tournament for 100+ participants during sports fest, managing logistics and scoring for seamless execution.

#### Coordinator, UDAAN IITGN

[Apr 2024]

 Organized an event for the passing out batch of 2024, managing all logistics and team coordination to ensure a seamless experience. Coordinated venue setup and scheduling, resulting in a well-received event.