Vardayini Agrawal
Second Year Undergraduate
Discipline of Mechanical Engineering
Indian Institute of Technology, Gandhinagar

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ACADEMIC DETAILS

Degree	Specialization	Institute	Year	CPI/%
B.Tech.	*B.Tech Mechanical Engineering*	IIT Gandhinagar	2023-2027	8.43
Class XII	*Physics, Chemistry, Maths*	R.N. Podar School, Mumbai	2021-2023	97.8
Class X		Queen Mary School, Mumbai	2010-2021	98.8

PROJECTS

- **Wettability Patterning of Nanostructuring Material Surfaces** [Aug'24- Present]
  (Prof. Soumydip Sett, IIT Gandhinagar) |
  - Analyzed and improved Peltier cooling efficiency by utilizing copper plate and copper foam. Leveraged copper's high thermal conductivity (398 W/m·K) for effective heat dissipation. Integrated copper foam to enhance cooling performance through increased surface area and improved heat transfer. Compared thermal properties of copper with aluminum, emphasizing copper's superiority for heat management in cooling applications.

- **Accident Detection and Alert System** [Jan'24-April'24]
  (Prof. Arup Lal Chakraborty, IIT Gandhinagar) | *Project Link*
  - In this project we have built an accident detection and alert system that detects an accident and records its GPS coordinates. Further, it sends an SMS on the stored number with the location coordinates of the accident site. This project involved the use of arduino, GPS, GSM and accelerometer

- **LPG Gas Leak Detection** [Jan'24-May'24]
  (Prof. Manasi Kanetkar, IIT Gandhinagar) | *Project Link*
  - Aimed to help kitchens and households by providing early detection and notification of potentially hazardous gas leaks. The system typically integrates a gas sensor, such as an MQ-6 sensor, which is highly sensitive to LPG and other flammable gases like propane and butane. This sensor continuously monitors the concentration of gas in the surrounding environment.

- **DrowSee: Driver Safety System** [Jan'24-May'24]
  (Prof. Himanshu Shekhar, IIT Gandhinagar) | *Project Link*
  - Utilised pressure and eye movement detection sensors to make a device that will beep in case the driver is drowsy. Made a compact model that can is compatible with all types of vehicles.

TECHNICAL SKILLS

- **Programming Languages: Python, C, HTML, SQL, JAVA.**
- **Tools and Libraries: MATLAB, Arduino IDE, MS-Excel, Numpy, Pandas, Matplotlib, Autodesk Inventor**

POSITIONS OF RESPONSIBILITY

- **CDS Placement Team Member, IIT Gandhinagar** [May'24-Present]
  - Collaborated with companies to facilitate recruitment processes for students, handling communication and coordination between industry and campus. Organized and managed placement drives, ensuring seamless scheduling and execution of interviews and assessments.

- **Professional Development Council Member** [May'24-Present]
  - Assisted in guiding students through placement preparation, including resume building, interview techniques, and company-specific insights

- **Blithchron Sponsorship Executive** [Dec'23-Mar'24]
  - Secured sponsorships for Blithchron, IIT Gandhinagar's annual cultural festival, by negotiating deals and securing partnerships with leading brands.

ACHIEVEMENTS

- **Awarded Dean's List for excellence in academics**