# Soumya Malviya

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ACADEMIC DETAILS				
Degree	Specialization	Institute	Year	CPI/%
B.Tech.	Electrical Engineering	IIT Gandhinagar	2022-Present	6.52
Class XII	Physics, Chemistry, Maths	St. Anne's School, Jodhpur	2020-2021	80.6
Class X		St. Anne's School, Jodhpur	2018-2019	86.4

### **PROJECTS**

Personal Portfolio Website

[June '24]

(Independent Project)

- Designed and developed a personal portfolio website to showcase projects, skills, and experiences.
- Utilized HTML, CSS, and JavaScript for a visually appealing, fully responsive site.
- o Implemented interactive features and animations to enhance user engagement.
- Ensured cross-browser compatibility and optimization for various devices.
- o Tools used: HTML, CSS, JavaScript, Git, GitHub.

# MERN Stack Hospital Management System

[June '24 - Ongoing]

(Independent Project)

- o Developed a hospital management system using MongoDB, Express.js, React, and Node.js.
- o Created tutorials for backend setup, database integration, API development, and frontend design.
- o Implemented patient registration, appointment scheduling, and admin dashboards.
- Key Responsibilities:
  - \* Backend: Configured Node.js and Express.js; integrated MongoDB.
  - \* Frontend: Designed a responsive interface with React.
  - \* Security: Implemented authentication, authorization, and data security.
  - \* Tutorials: Produced detailed documentation for learning and replication.
- o Technologies Used: MongoDB, Express.js, React, Node.js, HTML, CSS, JavaScript, RESTful APIs, Git, GitHub.

# • Fall Detection System for closed spaces

[May '23 - July '23]

(Prof. Udit Bhatia, IIT Gandhinagar)

- Worked with a team of 30 members to develop a prototype that solves an engineering-cum-societal problem within the budget of 15k.
- Developed a robust Fall Detection System for enclosed spaces, integrating piezoelectric sensors, IR sensors, and Arduino UNO, prioritizing the safety of both children and elderly individuals.
- o Tools used: Piezoelectric sensors, IR Sensors, Arduino UNO.

### • Hydraulic Floor Jack

[May '23 - July '23]

(Prof. Jayaprakash K.R., IIT Gandhinagar) | Project Link

- o Designed and 3-D modelled a hydraulic floor jack using Autodesk Inventor Professional
- Created orthographic projections of all the parts and assembled the parts and created a simulation showing the smooth working of the model

# TECHNICAL SKILLS

- **Programming Languages:** C, C++, HTML, CSS, JavaScript, Node.js, Express.js, Python, Machine Learning (Basics), Web development, Verilog
- Tools: Autodesk Inventor Professional, Matlab, Arduino IDE, Google Colab, Git, Vivado
- Library: NumPy, Pandas, Matplotlib, SciPy, Scikit-Learn

### **RELEVANT COURSES**

Data Structures and Algorithms - I, Digital Systems, Probability, Statistics, and Data Visualization, Data-Centric Computing,

### POSITIONS OF RESPONSIBILITY

• Senior Public Relations Executive, Blithchron '24 (Annual Cultural fest, IITGN)

[May '23 - March '24]

- o Ideated, developed budget and managed logistics while coordinating with volunteers, administration and sponsors.
- Leveraged networking skills to expand event reach and delivered Gujarat's largest student-run cultural festival.

### • Council Member, Cultural Council, IIT Gandhinagar

[May '23 - March'24]

Coordinate and enhance various cultural activities and initiatives, including events, performances, and cultural exchanges, to enrich student life and foster a vibrant cultural community.

### **EXTRA-CURRICULAR ACTIVITIES**

- The complete python Bootcamp by Udemy.
- Supervised Machine Learning: Regression and Classification by Coursera