Computer Science and Engineering

| Education | | | |
|-----------|----------------------------|-------|----------------|
| Degree | Institution | CPI/% | Year |
| B.Tech | IIT Gandhinagar | 8.05 | 2020 - Present |
| Class XII | My Shanon School, Vadodara | 78.6 | 2019-2020 |
| Class X | JJI School, Thermal | 94.59 | 2017-2018 |

Projects and Internships

• Solo Project, Chain Reaction: Web-Based Multiplayer Board Game

[March-May 2023]

- Created a web-based multiplayer board game, "Chain Reaction" using Django, HTML, CSS and JavaScript.
- o Implemented local and online multiplayer modes, allowing players to engage in random matchmaking or challenge friends for competitive play.
- Leveraged Django Channels and WebSockets for real-time gameplay updates and in-game chat function for enhanced player interaction during online multiplayer.
- Utilized Django models for efficient data management of individual user information, friend relationships and game statistics.
- Enhanced full-stack web development skills, covering front-end design using HTML, CSS, and JavaScript; back-end development using Django, and efficient data handling for real-time synchronization, multiplayer matchmaking, and seamless data storage.

• Summer Intern, IIT Gandhinagar

[May-July 2022]

- Worked under the guidance of Professor Nipun Batra on machine learning models, with a specific focused on Hidden Markov Models (HMMs).
- o Implemented essential HMM components, including HMM sampling, the Viterbi algorithm, and parameter estimation using Baum-Welch algorithm.
- o Contributed to the enhancement of Dr. Kevin Murphy's <u>book repository</u> on GitHub, resolving workflow errors and improving code quality.
- Transformed generated plots into LaTeX format to ensure high-quality and visually appealing figures for improved readability and comprehension.
- Utilized libraries such as JAX, matplotlib, seaborn, and TensorFlow to create visually appealing and insightful data visualizations, enhancing the overall presentation.

• Team member, Food Delivery Database Project

[Jan-March 2023]

- o Contributed to the development of a robust food delivery database system.
- o Played a key role in designing database schema and basic frontend security checks.
- Ensured ACID compliance for reliable data management.
- Acquired proficiency in MySQL, query writing, and database management principles.

Skill Summary

Languages: Python, C, C++

• Libraries: Django, NumPy, Pandas, Matplotlib

• Skills: Data Structures and Algorithms, Machine Learning, Database Management System

Extra-Curricular Activities

- Skilled in Creating realistic 3d models and animations using Blender software.
- Passionate chess player.