Pranjal Gaur

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ACADEMIC DETAILS				
Degree	Specialization	Institute	Year	CPI/%
B.Tech.	Computer Science and Engineering	IIT Gandhinagar	2022-2026	8.58
Class XII	Physics, Chemistry, Maths	Siddhath Public School (CBSE Board)	2020-2022	96.4
Class X	· ·	Siddharth Public School (CBSE Board)	2018-2020	91.6
PROJECT	c			

Binary Image Classification Using VGG Architecture

[Apr '24]

(Prof. Nipun Batra, IIT Gandhinagar)

- Developed VGG1 and VGG3 Convolutional Neural Network architectures to classify images into two categories.
- o Applied data augmentation techniques and trained the VGG3 model on this enhanced dataset.
- Utilized transfer learning with pre-trained VGG16 models, experimenting with both frozen and unfrozen connected layers.

• Text Generator based upon next character prediction from an MLP

[Mar '24]

(Prof. Nipun Batra, IIT Gandhinagar)

- Developed a pipeline model for next character prediction based on the context of previous *k* characters.
- Trained models on several corpora like Gulliver's Travels, English Wikipedia 8, Atomic Habits, Tolstoy's Essays, Alice in the Wonderland with varying embedding size of the vocabulary.
- Deployed a Streamlit application with all the trained models to allow the user to select various hyperparameters graphically.

• Logical Puzzle and Graph based Games developed using C and C++

[Aug '23 - Nov '23]

(Prof. Balagopal Komrath, IIT Gandhinagar)

- Developed games such as Connect4, Up-it-Up, Sudoku Solver, and a 2x2x2 Rubik's Cube Solver, implementing optimal move strategies and graph traversal algorithms for two-player interactions.
- Designed and developed intuitive user interfaces for games and applications, enhancing user experience and engagement.

• Analysis of Datasets using Probability, Machine Learning, and Statistics

[Jan '23 - April '23]

(Prof. Shanmuganathan Raman, IIT Gandhinagar)

- Implemented statistical and probabilistic analysis on several datasets including the American College Data (AAUP and US News), Goodreads Books, and the 2013 Grand Slam Tennis.
- Uncovered critical insights through advanced data manipulation and visualisation techniques using Python libraries such as NumPy, Seaborn, Plotly, Pandas, Scikit-Learn.

TECHNICAL SKILLS

- **Programming Languages:** Python, C, C++, Verilog.
- Tools: Xilinx Vivado, Laser Cutting. Autodesk Fusion 360, Autodesk Inventor, Laser Cutting.
- Libraries: PyTorch, NumPy, SciPy, Pandas, Plotly, Matplotlib, Seaborn, Scikit-Learn, Streamlit, OpenCV, TSFEL.

ACHIEVEMENTS

- Selected for **Mahabir Prasad Sultania Scholarship** of Rs. 1.00 Lakh for the AY 2023-24 for excellent overall performance.
- Felicitated with **Dean's List** Award IITGN for Semester I, II for excellent academic performance.
- Secured an All India Rank of 3535 in the Joint Entrance Exam (Advanced) and 5200 in the Joint Entrance Exam (Main)...
- Successfully cleared Stage 1 of the NDA examination on the initial attempt,
- Achieved an outstanding score of **96.4**% in the 12th board examination, securing the top position in the entire district.
- Excelled in Mathematics with a perfect score of **100 marks** in the 10th board examination, followed by **98 marks** in the 12th board examination

POSITIONS OF RESPONSIBILITY

• Senator, Student Senate IIT Gandhinagar

[Nov '23 - Present]

- Represents student community in front of the Institute Senate to address their major issues.
- o Used real-life problem-solving skills for the welfare of students, developed leadership skills.
- Working in the Senator Feedback Committee in Student Senate to supervise the work of all the senators of student senate and give regular feedback to the convener

• General Member, Welfare Council, IITGN

[May '23 - April '24]

Contributed to various initiatives aimed at enhancing student welfare and fostering a supportive campus community.