

PROJECT SPECIFICATION

Traffic Sign Classification

Dataset Exploration

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Visualization	Student performs a visualization on the dataset.

Design and Test a Model Architecture

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Solution Design	Student thoroughly discusses the approach taken for deriving and designing a model architecture fit for solving the problem given.
Model Architecture	Student provides sufficient details of the characteristics and qualities of the architecture, such as the type of model used, the number of layers, the size of each layer. Visualizations emphasizing particular qualities of the architecture are encouraged.

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Preprocessing	Students provides sufficient details of the preprocessing techniques used. Additionally, the student discusses why the techniques were chosen.
Dataset and Training	Student describes how the model was trained and evaluated. If the student generated additional data they discuss their reasoning.

Test a Model on New Images

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Acquiring New Images	Student chooses five candidate images of traffic signs taken and visualizes them in the report. Discussion is made as to any particular qualities of the images or traffic signs in the images that may be of interest, such as whether they would be difficult for the model to classify.
Performance on New Images	Student documents the performance of the model when tested on the captured images and compares it to the results of testing on the dataset.
Model Certainty Visualization	The softmax probabilities of the predictions on the captured images are visualized. The student

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	discusses how certain or uncertain the model is of its predictions.

[Student FAQ](#)