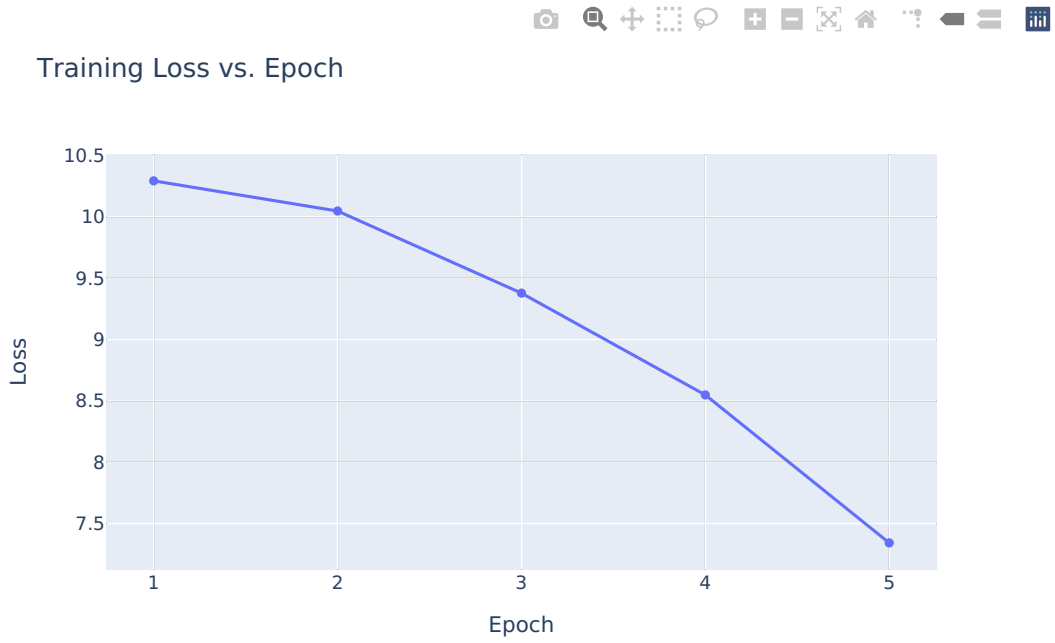
Training Summary Report

This report provides a comprehensive overview of the training process. It includes interactive charts and detailed explanations to help you understand the modelâ€™s learning behavior and identify areas for improvement.

Interactive Charts

Training Loss vs. Epoch

The training loss measures the error between the model's predictions and the actual data. A steadily decreasing loss indicates effective learning.

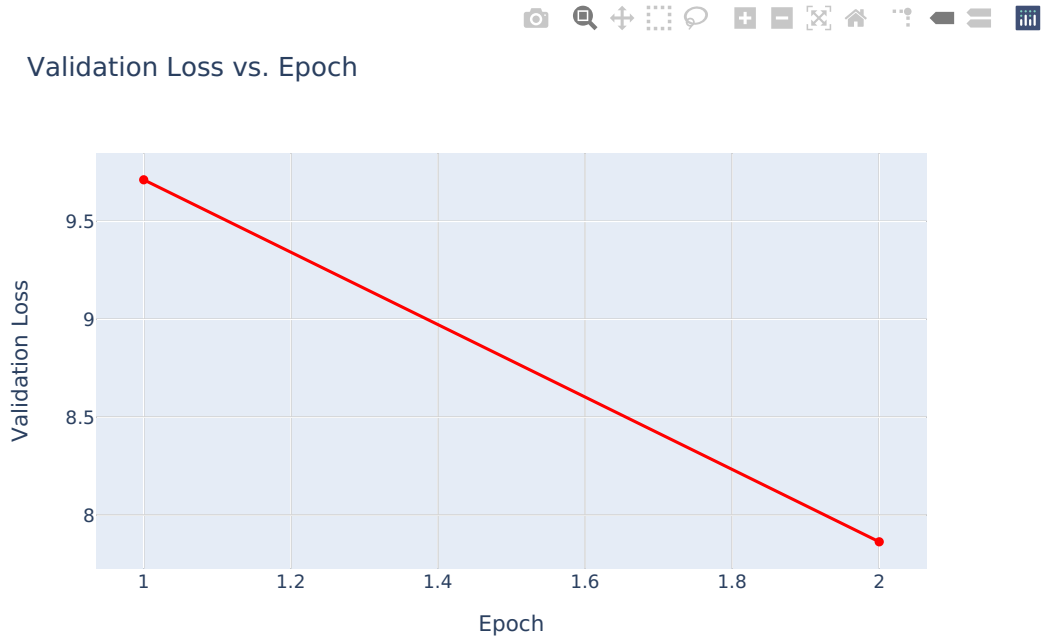


Aggregate Score vs. Epoch

The aggregate score combines several evaluation measures (e.g., BLEU, ROUGE, exact match) into one value. An increasing score generally signals improved performance.

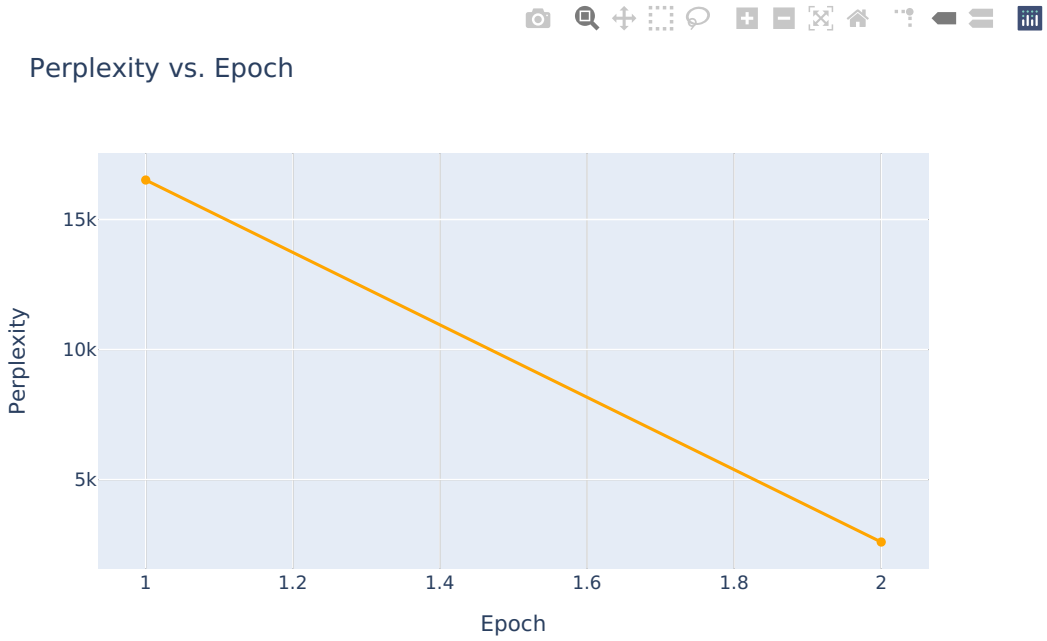
Validation Loss vs. Epoch

Validation loss is computed on a hold-out dataset and provides insight into how well the model generalizes. A decreasing validation loss is a positive sign, while an increase may indicate overfitting.



Perplexity vs. Epoch

Perplexity is a measure of how well a probability model predicts a sample. Lower perplexity generally indicates better model performance.



Improvement Suggestions

Based on the training history, the system suggests the following improvements to enhance model performance:

Suggestions: Based on the training history summary provided, here are some actionable suggestions to improve the training data quality or process for better model performance: 1. **Data Quality Check**: - **Data Preprocessing**: Ensure proper preprocessing steps are applied to the training data, such as handling missing values, scaling features, encoding categorical variables, and removing outliers. - **Data Augmentation**: Consider augmenting the training data by applying transformations like rotation, translation, or flipping to create more diverse examples for the model to learn from. 2. **Model Complexity**: - **Model Selection**: Evaluate if the current model architecture is suitable for the complexity of the problem. Consider experimenting with different architectures or increasing the model capacity if the current model is underfitting

Training History Details

Epochs: [1, 2, 3, 4, 5]

Training Loss per Epoch: [10.29293308729007, 10.046928393987962, 9.377690350567853, 8.547785329230038, 7.341995404090411]

Aggregate Scores per Epoch: [0.04264751807816851, 0.027313626815430522]

Validation Loss per Epoch: [9.712175687154135, 7.863657845391168]

Perplexity per Epoch: [16517.49972333343, 2601.0171144867904]

These trends can help guide adjustments in training data quality and hyperparameter tuning.