Project Title:

Development of a Reduced-Order-Model from Synthetic CFD Data using Convolutional Neural Network

Weekly Progress Report

Week 3: (Feb 24 - Mar 2, 2025)

Tasks Completed:

- Conducted EDA on converted CFD dataset.
- Visualized key trends in temperature, velocity, and pressure.
- Identified data distribution and potential pre-processing requirements.

Challenges Faced:

- Understanding correlations between different parameters.
- Handling anomalies and outliers in the dataset.

Tasks Planned for Next Week:

- Compute summary statistics (mean, std, min, max, quartiles) for each parameter.
- Prepare parameter-wise datasets for CNN training.