Project Title:

Data-Driven Prediction of Temperature in CFD Simulations Using Ensemble Models.

Week 8 (Mar 28 – Apr 3, 2025)

Tasks Completed:

- Visualized regression predictions vs. actual CFD results using:
 - o Line plots over time
 - o Residual plots
 - Temporal evolution heat maps
- Analysed model limitations in extreme temperature prediction zones.

Challenges Faced:

• Overfitting observed when increasing Regression layer depth; resolved with dropout regularization.