

Project Title:

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

Weekly Progress Report

Week 1: (Feb 10 - Feb 16, 2025)

Tasks Completed:

- Generated raw .txt files from CFD simulations in ANSYS Fluent 18.
- Explored file structure and data organization within the .txt files.
- Identified key parameters like: Temperature, Velocity, Pressure.

Challenges Faced:

- Initial difficulty in extracting structured data from .txt files.
- Large dataset size posed computational challenges.

Tasks Planned for Next Week:

- Convert .txt files into .csv format for further processing.
- Validate data integrity and consistency.