## Week 3

## **Tasks Completed:**

- Applied train-test split to balanced dataset (360 total entries).
- Trained baseline models: Linear Regression and Random Forest.
- Initiated hyperparameter tuning for Random Forest.

## **Challenges Faced:**

- Feature scaling required for models like ANN and SVR.
- Initial tuning required multiple iterations to stabilize results.

## Tasks Planned for Next Week:

- Complete hyperparameter tuning for all models (RF, SVR, ANN).
- Compare model performance using R<sup>2</sup> and MSE.
- Begin feature importance analysis.