

Recap - I

1. Introduction to PyTorch and tensor manipulations
2. Automatic differentiation and gradient-based optimization
3. Advanced optimization methods

Recap - II

1. Polynomial regression/fitting
2. Training-testing splits, underfitting/overfitting, model complexity
3. Neural networks: theory and basics

Session plan

1. Data normalization
2. Surrogate optimization
3. Inverse problems with neural networks

Follow-ups

1. Start doing group lab assignments *progressively* (*don't wait until last session*)
2. Solution notebooks from today's session and related lab assignment on Brightspace by today end-of-day
3. Next session: introduction to project