Project proposals summary

General feedback on project proposals.

- What is the question you are going to answer?

- What are the data you are going to work with?

- What methods will you use to answer this question?

- How will those methods answer the question?

- How will you train and validate your method?

- How will you quantify confidence/uncertainty?

Project proposals – common issues

The proposals had a few common types of issues:

- Data are not available or clean.

- Extending a homework assignment with deep learning.

- Running simple methods on an existing Kaggle challenge.

- Using time series approaches for financial data.

- Using convolutional autoencoders for image data.

Project proposals – ideas to address common issues

Suggestions to improve proposals:

- Data are not available or clean: use existing clean datasets.

- Extending a homework assignment with deep learning: add additional meta-data or information. Don't assume using a different method will give you different results for the same objective.

- Running simple methods on an existing Kaggle challenge: reframe the problem and ask different questions than the original challenge. What more can you do with those data?

- Using time series approaches for financial data: What mechanisms are being identified here? How are these approaches solving important problems?

- Using convolutional autoencoders for image data: What patterns do you pick up in those autoencoders? how do those patterns address problems of prediction or classification?