

FYS-STK4155: Project 1

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Abstract

The goal of this project is to do linear regression with bootstrapping and cross-validation on the Franke function and real data.

1 Introduction

The heart.

2 Theory

2.1 Linear regression

2.1.1 Ordinary least squares

2.1.2 Ridge regression

2.1.3 LASSO regression

2.2 Resampling methods

2.2.1 Bootstrap

2.2.2 Cross-validation

2.3 Confidence intervals

3 Implementation

4 Results

5 Discussion

6 Conclusion

References

7 Appendixes?