

DATA6811 -Computational Inference for Machine Learning

Assignment 1

Due: Sunday 13 March 2022, 23:59AEST

1 General Description

This assignment covers topics 1-2 of DATA6811, evaluating knowledge in the topics of Statistical Inference, Probability Theory and Simulation Based Methods. It consists of programming and technical exercises which are closely related to the topics covered in the respective tutorials.

1.1 Deliverables

Submission will be through Microsoft Teams. Please complete the python notebooks / r markdown files for each section and upload them to the Teams assignment environment in the "your work" section.

Marking criteria involves a total of 100 points, with 50 points assigned to the content of each week. A penalty of MINUS 5 points per each day after the due date will be applied.

2 Statistical Inference and Probability Theory (50%)

Please follow the instructions and exercises from the file 'DATA6811 - Assignment 1 - Statistical Inference.Rmd'. Add this completed file to the repository.

3 Simulation Based Methods I (50%)

Please follow the instructions and exercises from the file 'DATA6811 - Assignment 1 - MCMC.ipynb'. Add this completed file to the repository.