AI4ER 0: Introduction to Machine Learning

Rich Turner
Questionnaire results: topics

- Bayesian non-linear regression (2.6)
- Visualising Bayesian linear regression: Online learning (2.3)
- Forms of inference: A Radioactive decay problem (2.1)
- Multi-class softmax classification (2.1)
- Non-linear classification (2.1)
- Fitting the binary logistic classification model using max. like. (1.9)
- Non-linear regression (1.9)
- Bayesian decision theory: A Medical problem (1.8)
- Linear regression (1.8)
- Regularised non-linear regression (1.6)
- Understanding the binary logistic classification model (1.6)
- Overfitting in classification (1.6)
- Overfitting in non-linear regression (1.5)
Questionnaire results: topics

- Question 7: Bayesian linear regression (2.9)
- Question 9: Multi-class classification (2.5)
- Question 3: Bayesian inference for a biased coin (2.5)
- Question 6: Max. like. learning for multi-output regression (2.3)
- Question 2: Inference in a Gaussian Model (1.9)
- Question 4: Probabilistic models for regression (1.8)
- Question 1: Maximum likelihood fitting of a Gaussian (1.6)
- Question 5: Max. like. learning for a simple regression model (1.6)
- Question 8: Logistic Classification (1.6)
Course Overview and Schedule

Friday 27th September

  9.45 - 10.30  Introduction to inference
11.00 - 12.30 Questions 1, 2 & 3

Monday 30th September

  9.45 - 11.00  Regression (esp. non-linear and Bayesian)
11.30 - 12.30 Questions 4, [5], 6, 7
13.30 - 3.00  Classification (esp. non-linear and multi-class),
              Questions [8], 9

Wednesday 2nd October

  11.00 - 12.00 Topic determined from feedback / spill over