Practical Modelling and Estimation

Ivana Drobnjak

i.drobnjak@ucl.ac.uk

How it works

- You get a biomedical project to work on
- You get a supervisor
- You work on core tasks in a group for 3 weeks
- You present results in a group presentation
- You work on advanced tasks individually
- You then write a report individually

Project 1

Group supervisors: Jack Wells

jack.wells@ucl.ac.uk

Project: Characterizing the Origin of the Arterial Spin Labelling signal in MRI

Project 2

Group supervisor Fani Deligianni

f.deligianni@ucl.ac.uk

Project: Modelling the relationship between structural and functional connectomes

Project 3

Group supervisor: Jamie McClelland

J.McClelland@ucl.ac.uk

Project: Modelling respiratory motion for guiding Radiotherapy (RT) treatments

Project 4

Group supervisor: Andrew Melbourne

a.melbourne@ucl.ac.uk

Project: Analysis of MRI T2 relaxometry

Grouping

Jack

1
- Liu Xiaoran
- Jiang Xin
- Chang Chia-Wei

2
- Bennett Oscar
- Cornegruta Savelie
- Kourouklides Ioannis

Jamie

3
- Karsa Anita
- Ferraris Sebastiano
- Dilllee Antoine

4
- Razvan Marinescu
- Biffi Benedetta
- Tchaka Kevin

Andrew

5
- Chalk Alan
- Le Quan
- Scott Catherine

6
- Dingwall Nicholas
- Martin Teresa
- Goncalves Carla

Fani

7
- Ryan Lamb
- Ward Lionel
- Owers James

8
- Zheng Lei
- Zhao Yaolin

Project work

1. Do core tasks
   - Work in a group
   - Supervision: Mondays 16th and 23rd March at 3pm
     - Bring the questions !!
     - Your supervisors will stay for as long as there are questions
     - If you have extra questions, e-mail them individually
   - Lab classes: Fridays 13th and 20th March 1-4pm
   - **Group presentation (10 min): 1-4pm Friday 27th March**
   - Best presentations will be rewarded!

2. Do advanced tasks
   - Work individually
   - Written report to contain both core and advanced tasks
   - **Written report (10 pages): by 3rd May**

Written report

- Individual work, **deadline 3rd May 2015**
- 10 pages long (including figures and tables)
- Introduction – explains the problem and the background
- Methods – explains data pre-processing, models and the implementation
- Results – explains the experiments and the results
- Discussion – an interpretation and discussion of your results and the conclusion

- Code you used should be uploaded separately on moodle

Assessment

- Projects are 50% of the mark of the whole course

- Marked are:
  - Presentation (10%)
    - Group mark
  - The written report (90%)
    - Individual mark

Project material

- On MOODLE:
  - Lecture notes
  - Data
  - Assignment

UCL

Good luck and have fun!

Leave the lecture after you have with you:

- Contact details of your other group members
- Contact details of your supervisor

First thing to do when you start project work:

- Contact your supervisor to find out what are their office hours
- On moodle you will find the details of all the lectures from today