**IRP tutorial 1 (week 3)**

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- **INTRODUCE myself, ask students to introduce selves (10 min)**
  - Did a recent masters at Edinburgh (and passed my 'IRP')
  - Really enjoy literature reviews and writing
  - My background in Electrical engineering / Signal processing
  - I love machine learning, I use it for my work, not research in the field
  - Have tutored many ML-related courses in the past (MLPR, PMR, IAML, NC)
  - People introduce themselves

- **PURPOSE: Tutorials versus meetings with supervisor (10 min)**

*Ask them what they think the differences are.*

  - Tutorials to focus on IRP as an assignment --> writing, formulating hypothesis,
  - Supervision to focus on content of project, identifying feasible scope and appropriate methods
  - These are meant to be **complementary**, though some supervisors may be more involved in the proposal assignment (reading drafts, etc.)
  - Some supervisors may request additional material, set additional deadlines. Both supervisors' and tutorial group deadlines need to be respected.
  - Alternately, tutorials CANNOT replace your supervisor-- need to have regular and productive meetings (which will require work from both of you).

- Tutorial expectations
  - Reminder of mandatory attendance-- little leeway for absences.
  - Be on time please!
  - I will not ask for a lot of prep work, but do ask that you will BRING things I ask you to bring, and DO the prep work. Remember that IRP is a one-shot deal!
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- **What is the IRP for? (20 minutes)**
  - Laying the groundwork for your dissertation project... and it is work!
  - Showing your supervisor that you understand the project and are capable of undertaking the work. Failing IRP= supervisor is NOT convinced that you are capable and should not proceed.
  - Gives you a start on the structure of your thesis, and some pieces of content (unless project direction changes radically post-proposal)

- **IRP assessment**
  - Online: link to "guidelines for writing a research proposal"

The assignment is a project proposal. This should be about 6 pages. A good proposal will provide a convincing case for the high quality of the proposed research. It will show an awareness of relevant

prior work and include a clear statement of the problems and hypotheses to be addressed and why they are important. It must also make clear exactly how the methods used to research those hypotheses will yield interesting results. There are many ways in which one might structure the material. As a guide, a good proposal might be organised as follows:

- Purpose
- Background
- Methods
- Evaluation
- Outputs
- Workplan

- You are <u>assessed on</u> (see "IRP Feedback sheet")
  - Quality of project motivation
  - Quality of research plan
  - Demonstration of understanding of the area of work
  - Your clarity of expression and presentation
  - There must be a clearly defined informatics **research** hypothesis
  - Must be humanly possible to complete in 12 weeks

- ***IRP contents***
  - *Ask students how they think a research proposal is structured and write answers on the board)*
    - scientific aim/hypothesis.
    - Why should I care? Impact. Novelty
    - existing work
    - methodology
    - evaluation criteria
    - output/deliverables
    - timetable
    - Back-up plan if things fail

REMEMBER that it would not be called "research" if we all knew exactly what we were doing! The project will evolve over the course of your IRP, and will keep evolving after that!

**REMEMBER that your supervisor is someone who offers supervision and mentorship. You should be doing the work, and you should ideally work on something that interests you and that you want to do. Many projects can start with the standard proposal and be shaped by your particular interests and skills. It is reasonable to end up with a project where some skills must be learned, but not good idea to take on a project where you have minimal background and most skills must be learned.**

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- **Short description of assigned projects (Remaining time)**
  - 2 mins per person (maximum)
  - Project title / Supervisor
  - What they will do very briefly.

- **Homework**

- Read “irp.good.pdf”. (*Image segmentation*)
- Read “irp.bad1_with_comments.pdf”
- Read “irp.bad2_with_comments.pdf