

Guidance on final essays

Topics in Cognitive Modelling

School of Informatics, University of Edinburgh
John Lee, Chris Lucas

Format and content

Your essay should be based around one or two papers of your choice on a topic in cognitive modelling. It must discuss empirical findings¹ in the context of a computational model or models. Perhaps the easiest way to do this is to find a single paper that includes both empirical and modelling results, but you could look for complementary papers instead. Basing your essay primarily on a single paper can be sufficient if the paper is very meaty, i.e., fairly long and including many experiments or a lengthy comparison with other approaches. Alternatively you could look at two shorter papers covering different models of a single phenomenon, or additional experiments testing the same model. Marking will take into account the difficulty of the chosen article(s)/theme(s). It's okay to choose an older paper, but then make sure to cite some more recent related papers in your discussion.

You must have your choice of paper(s) approved by the deadline given below. For help choosing papers, see the tips on the website in the first instance. If you are still having trouble, feel free to contact one of the instructors well *before* the deadline. Essays may not focus on papers that are the subjects of student presentations. In other words, if a paper is on the main reading list and its topic has been chosen for a presentation, it is not suitable as the main subject of an essay.

Whether you choose one or two main papers, your essay should discuss the context of the work (i.e., behavioural findings or philosophical questions addressed), summarise the model(s) and experiment(s), and critically evaluate the work. A good essay will include some material you get from “reading around” the topic. You may also wish to address one or more of the following questions: how does this work relate to other models/approaches we have studied in class? What questions are raised by this work? What further experimental or modelling work might help to address these questions? Your goal is to demonstrate that you can read a cognitive modelling paper, understand its methods, evaluate its claims and place it in context in the field.

Your essay should be between 2500 and 3000 words, including headers and figure captions but not the bibliography, and should be written at a level that an interested but non-specialist reader would understand – someone who has some background in cognitive science but not necessarily in the specific area you are discussing. Articles in the journal *Trends in Cognitive Science*, many of which have been included as background readings in this course, are good examples of this level of writing (although the format/content of these articles is different from what you will write).

Deadlines

- Deadline for approval of paper choice: 11 February.
- Deadline for essay: 4pm, 19 March.

Citations, collaboration and plagiarism

Your essay must be your own work. The University takes plagiarism very seriously, and ignorance of definitions or policies is not considered an excuse for violating them. Please

¹These must include data from experiments, observational studies, and/or surveys involving humans. Purely “in silico” results do not suffice.

read the reminders below about what constitutes plagiarism and how to appropriately cite the work of others. For details on plagiarism and plagiarism policies at the University, see <http://www.inf.ed.ac.uk/teaching/plagiarism.html>.

Definition: Plagiarism is the act of copying or including in one's own work, without adequate acknowledgment, intentionally or unintentionally, the work of another. It is academically fraudulent and an offence against University discipline.

A non-exhaustive list of examples of plagiarism:

- Including extracts from another person's work without using quotation marks and acknowledgment of source.
- Summarising others' work without acknowledgment.
- Using others' ideas or help without acknowledgment.
- Copying another student's work, with or without their knowledge or agreement.
- Cutting and pasting text, illustrations, diagrams, etc. from electronic sources without acknowledging the URL.

To comply with these regulations and show awareness of good scholarship practices, you should make sure to cite any sources used in your essay. This includes both the particular papers you are discussing, as well as any information you include from additional background reading. Here are some guidelines on citations:

- Specific pieces of information gained from sources should include a citation.
- For an extended description (1 or more paragraphs) of more general information gained from a source, a single citation is usually sufficient provided it is clear that the citation covers the entire description.
- Direct quotations must use quotation marks and include a citation. However these should be used sparingly. The use of many quotations will be taken as an indication that you do not understand the material enough to state it in your own words.
- Any images, figures, or tables copied directly or with minor modifications must also include a citation (to a paper or URL).

Any standard citation format is acceptable but you should be consistent in the format of your references.

Finally, as usual in this course, you are free to discuss the topics, papers, and models described in your essay with other students as much as you like. However, your essay must be your own work, stated in your own words, and you must acknowledge any significant help or ideas gleaned from other students. This can be done in an acknowledgment section (for general help) or in a citation to "Lastname, Firstname, date: personal communication." (for specific ideas).

Marking

Your essay is worth 55% of your final mark. Please see the marking rubric for an idea of the criteria that will be used to determine your mark.