

– The University of York –
MEng, MSc, 2010–2011

MENG IN COMPUTER SYSTEMS AND SOFTWARE ENGINEERING,
MSC IN NATURAL COMPUTATION
Part A/B

COMPUTER SCIENCE WRITING
Open Examination

Issued at:
10 November 2010
(Autumn/5/Wed)

Submission due:
Review: 26 January 2011
(Spring/3/Wed)
Presentation: 4 February 2011
(Spring/4/Fri)

Your attention is drawn to the Guidelines on Mutual Assistance and Collaboration
in the Student's Handbook.

All queries on this assessment should be addressed to
Dr Stefano Pirandola (pirs@cs.york.ac.uk) by email.
No questions will be answered after Monday 17 January 2011.
Answers will be given by email AND/OR will appear on the website,
<http://www-course.cs.york.ac.uk/csw/assessment/QandAs.html> .

Your examination number must be written on the front of your submission.
You must not identify yourself in any other way.

Assessment structure

The assessment is in two parts: an academic literature review, and an oral presentation. The review contributes **45/50** marks. Hard copy of the review should be submitted to the Departmental Office in the normal way: this version will be regarded as definitive and will be the version marked. In addition, an electronic submission of the review will be required: this will be submitted to a plagiarism checking tool. Precise details of the submission mechanism will be supplied later. The presentation contributes **5/50** marks. The presentations will take place in scheduled sessions in Spring week 4. Each student will present to the other students in that session and Dr Stefano Pirandola. Marking will **not** be anonymous, and examination numbers must **not** appear on any material used in the presentation.

You will receive detailed **feedback** on both the review and the oral presentation. Marks and feedback will be available 4 weeks after submission of the assessment (spr/7/wed).

The structure of the assessment is stricter than the final-project guidelines, but the length limits are based on the requirements for the final project.

Marking criteria

The marking criteria for the review are given below in section 3.1. The marking criteria for the presentation are given in section 2.

1 The review

For the academic literature review, you should study two or three academic papers on related subjects, in detail. You should then write a review in the format given below. The goal of academic review is to contribute to the field of knowledge by comparison and critical commentary (not, for instance, just to précis the papers).

1.1 Choosing a subject area

You must select a *subject area*. You should select from the subject areas of the research groups, and the members of staff in the research groups, of the Department.

You can identify subject areas by consulting the relevant pages of the departmental website:

<http://www.cs.york.ac.uk/research.htm>

and individual staff pages, of the form,

<http://www-users.cs.york.ac.uk/~username/>.

Time estimate: up to one hour.

1.2 Choosing papers: deciding the focus of the review

Selecting material to review is a basic part of creating a literature review. You can consult the publication lists of people involved in the subject area that you have selected. You can also conduct literature (including Google) searches on key words from the subject area.

Selecting the papers to review is closely related to deciding on a focus for your review – a particular *aspect* of the chosen subject area.

You could look for papers that present two different aspects of a problem, perhaps from different theoretical or practical viewpoints. Or you could look for papers that build on each other, or build on a common starting point. Please note that it is common when conducting a literature review to consider and reject a number of papers before selecting those that are suitable for inclusion.

Time estimate: six to eight hours, typically spread across several days or even weeks.

1.3 Review preparation

You need to prepare by reading the papers that you have selected, and thinking about what they say. Things that you might consider could be, for example, whether the authors take a particular standpoint, or make particular assumptions; whether all the selected papers look at the same material in the same way (and if not, why not).

You also need to read (or reread) background material on the subject area and aspect, so that you can put your review in context.

In order to present a convincing review, you do not need to understand every last detail of the papers, but you do need to be able to explain to a non-specialist audience the context, and contribution of the papers that you review. Most importantly, you need to contribute to the reader's view of the subject area, for example by comparison of approach, results, merits and demerits of the selected papers.

You can prepare for how you will construct and write your review whilst selecting and reading papers and background material: observe how they present material, and decide whether it is good or bad! If the authors review existing work, is it a good academic review (reflective, contributing analysis etc.) or just a summary of what other people wrote, with nothing added. Look critically at how the sources you consider use referencing and citation. You might also want to look critically at literature reviews in projects held in the department's on-line project library. Use your observations to influence your style. You should **not** comment on such aspects of presentation in your review, but you may be inspired as to how to present your own review.

Time estimate: 15-20 hours.

1.4 Writing the review

The assessment has strict format and length directives. Read these carefully (sections 3.1 and 3.2, below), and decide what you need to write about in each section.

You also need to decide what convention you will use for layout, citation and referencing, any figures or tables etc.

You are likely to have to draft the assessment, then revise it several times, so that the final version is clear, concise, consistent, and meets the stated directives. Make sure that the final version has been proof-read **and** spell-checked.

Please note that students have in the past lost significant numbers of marks for poor citation. The required level of citation (on every fact, opinion and detail that is not your own contribution) may look excessive, but it **is** what is required.

Warning: Variation from the format and length directives will be heavily penalised.

Time estimate: 5 to 10 hours.

2 The presentation

For the presentation, you should prepare a **5-minute** oral presentation, in which you present the findings of your review.

The presentation is **not** anonymous. **Do not** use your examination number anywhere in your material.

Time estimate for preparation: up to one hour.

2.1 Recommended content

The recommended content and structure of the oral presentation are:

- Opening remarks – a very brief statement of the subject area and aspect reviewed, to put the talk in context for the audience;
- Papers reviewed – succinct statement of the material reviewed, noting relevant information such as the authors, the date, the sort of publication (eg journal paper, conference paper, technical report), and a short form of the title;
- Review summary – summarising the key points and findings of the review;
- Concluding comment – a well-rounded talk would return to broader context, perhaps reflecting on where the research described was leading, or what the papers contribute more generally.

2.2 Presentation and visual aids

You may use computer slides (eg Powerpoint), but are **not** required to do so, and there are no automatic marks for visual aids.

Visual aids, and particularly computer slides, are not necessary to achieve a good presentation – particularly a short presentation of this nature. In general, visual aids may be more appropriate for some topics than others. The rooms for the presentations all have a white/blackboard, and you are welcome to use this in your talk. Marker pens/chalk will be available.

If you decide to use computer slides, please note that you will be expected to supply your slides to Dr Stefano Pirandola 24 hours before the presentation, so that a laptop can be set up and changeovers can happen as smoothly as possible. However, as time is limited, and computers are unreliable, you should be prepared to give your talk without computer slides, in case of technical problems. In other words, if you choose to use computer facilities, you do so at your own risk, and are advised to have a backup plan to cope with unforeseen technical difficulties.

2.3 Marking of the oral presentation

The oral presentation is **not** marked anonymously. Do **not** put your examination number on any visual aids etc.

Marks will be awarded for clarity, concise presentation, and the quality of the review summary. Marks are likely to be lost for failing to set the review in context, for not clearly identifying the papers covered, or for exceeding the allotted time – you will **not** normally be allowed to complete your talk if you exceed 5 minutes.

If questions are asked after the presentation, you should answer them clearly and concisely. However, there are no marks (positive or negative) for quality of answers, as we cannot guarantee the quality of the questions!

3 Format and length directives for the academic literature review

3.1 Format for the review

The contents of the academic literature review must include the following numbered sections.

1. A brief **introduction** to the subject area that you chose, and the aspect that you selected. You should cite general sources for your introductory information, such as core texts, lecture notes, web-based introductory material, etc. [10 marks].

- This section must conclude with a brief introduction to the chosen review papers.
2. A **review** of the chosen aspect, using *at most* three specific sources (papers, articles, books etc) [20 marks].
 3. A **conclusion**, summarising the key points from the review, and making a proposal or suggestion for further research in the chosen aspect of the subject area [10 marks].
 - At the end of the conclusion, there must be a statement of the word count, formulated by completing the following sentence: *Report comprises [number] words as counted with [facility], excluding the bibliography.*
 - You may use any suitable word-count facility, but must state exactly what you used (eg. *linux wc -l on raw LaTeX source* etc.)
 4. The single-page **bibliography** must list references to all the sources used in the assessment, and must be sufficient to definitively identify each source [5 marks].

You should use the IEEE bibliographic style, as described in the lecture.

3.2 Length of the Review

The submission must total no more than 6 A4 pages, of which one A4 page shall comprise only the bibliography. The maximum word limit, including all titles, headers etc, but **excluding** the one-page bibliography, must total no more than 2250 words¹.

Failure to observe the page limit, the word limit, or both limits will result in automatic mark deductions.

- For a small over-run of either strictly less than one page or no more than 450 words, there will be a deduction of 10% of the achieved mark.
- For each additional full or part page overrun, or for each additional word excess of up to 450 words, another 20% of the achieved mark will be deducted.
- Note that if the page and word limits are both exceeded, the over-run will be penalised twice.

There is no lower length limit on the submissions, and no penalty for achieving the goals of the assessment in fewer pages or words.

¹LaTeX users, please note that J. Jacob's project style includes significant amounts of white space, and may not be appropriate for this assessment: the standard LaTeX article style is more compact.