

9th Warwick Electronic Bulletin on Empirical Modelling

1

Assessment for CS405

The major component of assessment of the CS405 module is a coursework submission worth 50% of the total credit.

The coursework exercise for 2012-13: contribute

- a *short paper*, and
- an *associated modelling study*

to WEB-EM-9, the

9th Warwick Electronic Bulletin on Empirical Modelling
(to be published on the intranet in due course)

May include a short interactive demo/presentation
that is itself un-assessed but will assist assessment

2

Further information

Application linked to one of eight principal applications
areas listed in the **Call for Papers** ...

... 'modelling study' to be broadly interpreted:

- an entirely new and original EM model
- and/or to the extension, comprehension or documentation of an existing EM model

You can specify the weight to be given to the written
and modelling components between 30-70 and 70-30

3

Deadline dates

Preliminary submission by Wednesday 21st November

- title and abstract of paper
- proposed theme of modelling study
- references to be consulted

Final submission by Tuesday 29th January 2012

- paper and model with proposed weighting
... to be submitted using the BOSS system

Interactive demo/presentations to be arranged later if/as required

4

Further information

- More details of potential themes and application areas to be given later in the module
- WEB-EM-1, WEB-EM-2, ..., WEB-EM-5 online at
.../dcs/research/em/publications/web-em/
- Guidance on writing your paper, including style templates and details of recommended length etc available online at:
.../dcs/research/em/teaching/cs405/assignment/

5

Advice on Submission

- start with a simple modelling exercise
- find existing EM models / papers of interest
- identify a topic/theme relating to an area of personal interest (e.g hobby, group project)
- consult with other students and EM experts
- look for useful external references on your theme
- don't be intimidated or over-ambitious initially
- note strategic implications of choosing weighting

6

Possible themes 1

- the discussion of an original model to illustrate how EM might be used in an application
e.g. the construction of an EM model to assist in the design and use of a mobile phone
- a comparison of how EM principles and conventional approaches address a particular application
e.g. a discussion of how observation-oriented parsing relates to traditional parsing, with examples

7

Possible themes 2

- an analysis of how EM tools could be improved with reference to a particular area of application
e.g. investigating how EDEN/JS-EDEN might be better adapted for use as a text processing tool
- a detailed evaluation of how well an existing EM model is adapted to its application
e.g. a study of how far the Jugs model can assist in porting software across platforms

8

Possible themes 3

- a critical assessment of the advantages claimed for EM in application in previous EM publications
e.g. an exploratory study and critique of how EM can be used to model software requirements
- a study of what is entailed in extending and/or combining existing models, and the implications
e.g. combining stick animations with models of sorting algorithms as an educational aid

9

MSc projects

Coursework for this module can potentially be linked to a subsequent MSc project, subject to appropriate separation of concerns.

For some suggestions, consult:

.../dcs/research/em/teaching/projectideas

Note that you will need an official supervisor

10