Research student's self-assessment

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12 - How has your work gone in the past six months?

During Hilary term, I attended the course "Automata Logic & Games".

In March, I attended the Bonn spring school on GAMES and the British Colloquium in Theoretical Computer Science in Nottingham.

I gave a talk at BCTCS about my MSc dissertation "Termination analysis of a subset of CoreML".

I spent the first four months of my DPhil reading articles in different directions in order to find an interesting problem to work on. I have been reading about topics such as program transformation [8, 7], modal mu calculus, termination analysis [11, 12, 1], automata theory [3].

13 - Research plan for the next term and vacation:

I will study a restriction of lambda-calculus called "safe lambda-calculus" as described in [2]. My goal will be to determine some nice properties on safe lambda terms (for instance whether a safe lambda term is size-change terminating, see [9, 4]).

I will also work on a small project with Matthew Hagues and Luke Ong about LTL model checking. Using techniques described in [10, 5, 6], we would like to implement a fast algorithm to verify a property expressed in LTL on a model given by a Kripke structure.

In July, I will attend the Program Analysis and Transformation summer school in Copenhagen.

In August, I will attend the international Summer School in Marktoberdorf.

14 - Comments

I am totally unsatisfied with the computer facilities provided by the department for the research students. The Solaris computers are obsolete and not at all adapted for office and research needs. The Ultra 5 machines are extremely

slow, almost unusable. The PC computers are very slow and struggle running Windows Xp.

References

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