PhD Scholarships at the Technical University of Denmark within the areas of Semantics, Analysis and Verification

Research Areas:
- Modelling of systems and their properties
  - Process calculi and automata for Embedded systems
  - Service oriented systems
  - Workflow models
- Logical formalisms for
  - Discrete properties (e.g. correctness, security)
  - Stochastic properties (e.g. performance)
  - Continuous properties (e.g. resource usage)
- Analysis techniques
  - Static program analysis
  - Data flow analysis
  - Abstract interpretation
  - Type systems
  - Flow logic
  - Model checking
    - Discrete
    - Stochastic
- Realisation
  - Prototypes
  - Algorithms and data structures

Example Application Areas:
- Modelling of Information Technology
  - see [www.MT-LAB.dk](http://www.MT-LAB.dk)
- Cyber Physical Systems
  - see [www.idea4cps.dk](http://www.idea4cps.dk)

How to enquire:
1. Write a short introduction of yourself.
2. Write a page about your scientific background (from those listed).
3. Write a page about your research ideas (and how they might fit ours).
4. Fill out the form on [http://www.dtu.dk/English/education/phd_education.aspx](http://www.dtu.dk/English/education/phd_education.aspx) (in particular the grades – ask [masad@imm.dtu.dk](mailto:masad@imm.dtu.dk) if in doubt).
5. Get a letter of recommendation from a supervisor or teacher.
6. Send it as one pdf to [nielson@imm.dtu.dk](mailto:nielson@imm.dtu.dk)
7. A formal application comes later.

A PhD Scholarship is for three years; you will be part of an international research group (see [http://lbt.imm.dtu.dk](http://lbt.imm.dtu.dk)) whose daily language is English, you will be paid about 3300€ per month, and you would be expected to spend up to half a year in a relevant research group outside of Denmark.