



3rd INTERNATIONAL DOCTORAL CONSORTIUM ON
INFORMATICS AND INFORMATICS ENGINEERING EDUCATION
RESEARCH: METHODOLOGIES, METHODS, AND PRACTICE

Vilnius University Institute of Mathematics and Informatics in cooperation with
NNEER - Nordic Network in Engineering Education Research
Lithuanian Computer Society

Organisers:

Prof. Valentina Dagienė, chair
Dr. Tatjana Jevsikova
Inga Žilinskiene

3–7 December 2012
Druskininkai, Lithuania

AGENDA

Monday, December 3

- 15:00 Transfer to Druskininkai – bus leaves from the Vilnius airport at 15:05
- 18.30 Dinner
- 19.30 Welcome, being together, and social activities (including sauna)

Tuesday, December 4

- 07.30 – 09.00 *Breakfast*
- 09.00 – 10.00 **Prof. Márta Turcsányi-Szabó** (Eötvös Loránd University, Hungary): Innovations in Educational Technology - Augmenting teacher education to involve public education, professional development and informal learning.
- 10.00 – 11.00 **Dr. Robin Clark** (Aston University, UK): What's in a method? Choosing an appropriate methodology and why it is important.
- 11.00 – 11.30 *Coffee break*
- 11.30 – 12.15 **Prof. Jonte Bernhard** (Linköping University, Sweden): What is the level of a PhD thesis in Engineering Education Research? Role of Nordic Network in Engineering Education Research.
- 12.15 – 13.00 **Dr. Ari Korhonen** (Aalto University, Finland): On research of the role of visualization in computer science education
- 13.00 – 14.00 *Lunch*
- 14.00 – 15.00 **Dr. Päivi Kinnunen** (University of Eastern Finland): Classifying computing education papers: taxonomies and what we can learn from them
- 15.00 – 16.00 **Dr. Anna Eckerdal** (Uppsala University, Sweden): Developing learning models in educational research: an example from computing education
- 16.00 – 16.30 *Coffee break*
- 16.30 – 17.30 **Prof. Gerald Futschek** (Vienna University of Technology, Austria). Criteria for writing informatics education doctoral thesis from a reader's viewpoint. Group work
- 17.30 – 22.00 Initial posters' presentations of doctoral students and discussions
(19.00 – 20.00 *Dinner*)

Wednesday, December 5

- 07.30 – 09.00 *Breakfast*
- 09.00 – 13.00 Group work. Students will be divided in 4–5 working groups according to their topic. The research seniors will be appointed to each group (with *coffee break* at 11.00–11.30)
- 13.00 – 14.00 *Lunch*
- 14.00 – 15.00 **Prof. Albertas Čaplinskas** (Vilnius University Institute of Mathematics and Informatics). Doctoral studies in Informatics engineering in Lithuania and relationship with education.
- 15.00 – 18.00 **Dr. Noa Ragonis** (BeitBerl College, Technion, Israel). Qualitative research methods in computer science education research: Review, demonstration and implementation approaches. An activity based lecture and workshop (with *coffee break* at 16.00–16.30)
- 18.00 – 22.00 Group works continued
(19.00 – 20.00 *Dinner*)

Thursday, December 6

- 07.30 – 08.30 *Breakfast*
- 8.30 – 12.00 Excursion. Alternative: Group work and improvement of posters
- 12.00 – 13.00 **Dr. Päivi Kinnunen** (University of Eastern Finland). Qualitative data collection and analysis methods.
- 13.00 – 14.00 *Lunch*
- 14.00 – 16.00 Group work. Improve your initial poster which summarizes your research: Your BIG research question, goal, small subtasks, data collection and analysis methods, theoretical framework, cope, and use of results.
- 16.00 – 16.30 *Coffee break*
- 16.30 – 18.00 Doctoral poster presentations: all participants should read posters and write down their questions or comments.
- 18.00 – 19.00 *Dinner*
- 19.00 – 21.00 Summing up: overview and suggestions by group leaders. General discussion, including a brainstorming session about current and future research topics in the area.

Friday, December 7

- 07.30 – 09.00 *Breakfast*
- 09.30 Departure

The Third International Doctoral Consortium will be organized by Vilnius University Institute of Mathematics and Informatics on December 3–7, 2012 in Druskininkai, Lithuania.

The aims of the consortium are:

- To offer a friendly forum for doctoral students to discuss their research topics, research questions and design in the field of computing education / educational technology – informatics engineering and education.
- To receive constructive feedback from their peers and senior researchers, to help with choosing suitable methodology and strategies for research.
- To support networking with other researchers in the informatics engineering education research field.
- To discuss any relevant questions related to research and academic life.

Participants

The consortium is designed primarily for students who are currently enrolled in any stage of doctoral studies with a focus on informatics / informatics engineering / computing education research. Students, who are considering doctoral studies but not have yet a formal doctoral student researcher status, may participate as well.

Senior researchers in the field will provide feedback and suggestions for improvement of the research proposals.

Requirements

Each participant should submit a document, which includes the following information:

- a brief background of the applicant including information about prior studies, research topic, publications if any, and possible teaching experience;
- a summary of his/her research, including motivation, any relevant background, and main literature (3-5 items) to contextualize the research, research questions, methodologies used or planned, and possible results obtained;
- questions related to the research that the applicant would like to discuss and get feedback on in the doctoral consortium.

The summary will be made available for other participants of the doctoral consortium to allow providing feedback and preparing questions on the research. The research summaries are in free format and should be 2-4 pages long. The following elements must be addressed in the papers and we suggest that you use these as headings for the sections of your submission:

1. A clear formulation of the research question(s);
2. An identification of the significant problems in the field of research;
3. An outline of the current knowledge of the problem domain, as well as the state of existing solutions;
4. A presentation of any preliminary ideas, the proposed approach and achieved results;
5. A sketch of the applied research methodology (data collection and analyzing methods)
6. A description of the Ph.D. project's contribution to the problem solution;
7. A discussion of how the suggested solution is different, new, or better as compared to existing approaches to the problem.