

# 6th BALTIC SEA CONFERENCE ON COMPUTING EDUCATION RESEARCH Koli Calling

## Program 2006

### Thursday, November 9

- 17:00 **The first bus transportation from Joensuu to Koli**  
*Joensuu Science Park, 17:00, Joensuu, Airport 17:40* (flight AY489 arrives at 17:25), *Joensuu, Railway station 17:55* (Arrivals: Train from Helsinki and Turku at 17:45), *Koli, 19:15*
- 19.30 Registration
- 20.00 Cold buffet  
Sauna
- 20.40 **The second bus transportation from Joensuu to Koli**  
*Joensuu, Science Park 20:40, Joensuu, Railway station 20:55* (Arrivals: Trains from Helsinki and Turku 20:50), *Joensuu, Airport 21:25* (flight AY3491 arrives at 21:10), *Koli, 23:00*

### Friday, November 10

- 08.00 - 9.00 Breakfast
- 09.00 - 09.15 **Opening.** Anders Berglund
- 09.15 - 10.45 **Session 1, Practical work.** Chair: Tapio Salakoski  
*The Unique Role of Lab Practical Classes in Computing Education,* Simon, University of Newcastle, Australia; Michael de Raadt, University of Southern Queensland, Australia; Ken Sutton, Southern Institute of Technology, New Zealand; Anne Venables, Victoria University, Australia  
*Modelling student behavior in algorithm simulation exercises with code mutation,* Otto Seppälä, Helsinki University of Technology, Finland  
*Do students SQLify? Improving Learning Outcomes with Peer Review and Enhanced Computer Assisted Assessment of Querying Skills,* Michael de Raadt, Stijn Dekeyser, Tien Yu Lee, University of Southern Queensland, Australia
- 10.45-11.15 Coffee
- 11.15 - 12.45 **Session 2, Early stages of learning CS.** Chair: Lecia Barker  
*Program Working Storage: A Beginner's Model,* Evgenia Vagianou, The American College of Greece, Greece and University of Sussex Falmer, UK  
*Test data generation for programming exercises with symbolic execution in Java PathFinder,* Petri Ihantola, Helsinki University of Technology, Finland  
*Learning Programming by Programming: a case study,* Marko Hassinen, University of Kuopio, Finland, Hannu Mäyrä, University of Kuopio, Finland
- 12.45 - 14.00 Lunch

14.00 – 15.15 **Invited speaker session 1**

*Defensive climate in the computer science classroom*, Lecia Barker, University of Colorado, Boulder, USA (The paper is written by Lecia Barker, Kathy Garvin-Doxas, Michele Jackson. Lecia Barker is supported by a travel grant from the ACM)

15.15 – 15.45 **Invited seminar session**

*The Development of Computer Science: A Sociocultural Perspective.*  
Matti Tedre, University of Joensuu, Finland

15.45 - 16.15 Coffee

16.15 – 17.45 **Session 3, Particular issues related to learning CS.** Chair: Simon

*Progress Reports and Novices' Understanding of Program Code*, Linda Mannila, Åbo Akademi University, Finland

*Moral Conflicts Perceived by Students of a Project Course.* Tero Vartiainen, Turku School of Economics, Pori Unit, Finland

*"I think it's better if those who know the area decide about it" - A pilot study concerning power in student project groups in CS*, Mattias Wiggberg, Uppsala University, Sweden

17.45 - 18.00 Break

18.00 - 19.00 **Poster / demo session.** The posters and demos (except for computers and other valuable equipment) are available until Saturday, after dinner. Chair: Erkki Sutinen

*ALOHA - A Grading Tool for Semi-Automatic Assessment of Mass Programming Courses*, Tuukka Ahoniemi, Tommi Reinikainen, Tampere University of Technology, Finland

*Plaggie: GPL-licensed Source Code Plagiarism Detection Engine for Java Exercises*, Aleksi Ahtiainen, Sami Surakka, Mikko Rahikainen, Helsinki University of Technology

*Educational Pascal Compiler into MMIX Code*, Evgeny Eremin, Perm State Pedagogical University, Russia

*Student Errors in Concurrent Programming Assignments*, Jan Lönnberg, Helsinki University of Technology, Finland

*Spatial Data Algorithm Extension to TRAKLA2 Environment*, Jussi Nikander, Helsinki University of Technology, Finland

*Creative Students: What Can We Learn From Them for Teaching Computer Science?*, Ralf Romeike, University of Potsdam, Germany

19.30 - 20.30 Dinner

20.30 Free time (sauna etc.)

## Saturday, November 11

- 07.00 - 09:00 Breakfast and registration
- 09.00 - 10.15 **Invited speaker session 2**  
*Valuing Computer Science Education Research?*, Tony Clear, Auckland  
University of Technology, New Zealand
- 10.15 - 10.45 Coffee
- 10.45 - 12.15 **Session 4, Theoretical aspects of computing education.** Chair: Ari Kurhonen  
*Understanding of Informatics Systems: A theoretical framework implying levels of competence*, Peer Stechert, University of Siegen, Germany  
*Most Common Courses of Specializations in Artificial Intelligence, Computer Systems, and Theory*, Sami Surakka, Helsinki University of Technology, Finland  
*Is Bloom's Taxonomy Appropriate for Computer Science?*, Colin Johnson, Ursula Fuller, University of Kent at Canterbury, England
- 12.15 - 13.15 Lunch
- 13.30 - 16.00 Free time to explore the Koli nature park
- 15.30 - 16.00 Coffee
- 16.00 - 17.30 **Session 5, Learning to Program.** Chair: Lauri Malmi  
An Objective Comparison of Languages for Teaching Introductory Programming, *Linda Mannila, Åbo Akademi University, Finland; Michael de Raadt, University of Southern Queensland, Australia*  
VirtualTutor: Automatic Tutoring Question Generation During Algorithm Simulation, *Ville Karavirta, Ari Korhonen, Helsinki University of Technology, Finland*  
The Preference Matrix as a Course Design Tool, *John Paxton, Montana State University - Bozeman, USA*
- 17.30 - 17.45 Break
- 17.45 - 18.45 **Pre-sauna speakers' corner:** Interested participants may speak briefly, for a maximum of five minutes, about what they, in the context of future plans, find important, for example new research questions, or ideas about new projects. Priority is given to newcomers and PhD students. PhD students are expected to address some of the open questions and/or current problems/issues in their projects. The questions are then further discussed over dinner, in the sauna and in the bar. A maximum of two slides (transparencies, not Powerpoint) per person, preferably only one. Chair: Linda Mannila
- 19.30 - 20.30 Dinner
- 20.30 Free time (sauna etc.)

## Sunday, November 12

07.00 - 09.00 Breakfast

09.00 - 10.00 **Session 7, Reflections on Students' Approaches to Learning.** Chair: Tony Clear

*Student Perceptions of Reflections as an Aid to Learning*, Arnold Pears, Lars-Åke Larzon, Uppsala University, Sweden

*A Qualitative Study of Reflective and Defensive Student Responses in a Software Engineering and Design Course*, Leslie Schwartzman, Roosevelt University, USA

10.00 – 10.30 Break.

10.30 - 11.00 **Discussion.** Topic to be decided during the conference. Chair: Arnold Pears

11.00 - 11.15 **Concluding remark.** Anders Berglund

11.30 **Departure**

Bus transportation from Koli to Joensuu, *Koli*, 11:30, *Joensuu, Airport*

13:00 (Flight AY3486 to Helsinki at 13:40), *Joensuu, Railway station*

13:30 (Departures: Train to Helsinki at 15:10), *Joensuu, Science Park*

14:00