

Koli Calling 2014 Program (as at 6 November)

Thursday 20 November

17.00 Transportation to Koli

- 17.00 *Science Park, Länsikatu 15*
- 17.15 *Joensuu Airport (flight AY2489 from Helsinki 17.25)*
- 17.45 *Joensuu Railway Station (IC5 from Helsinki 17.40, RT723 from Pieksämäki 16.56)*
- 19.20 *Arrive at Koli*

20.00 Welcome buffet

Friday 21 November

07.00 - 09.00 Breakfast

08.30 Registration

09.00 Opening session: Simon, Päivi Kinnunen

09.20 Session 1: computing in schools. Chair, Lauri Malmi

- Sarah Esper, Stephen Foster, William Griswold, Carlos Herrera, and Wyatt Snyder: CodeSpells: bridging educational language features with industry-standard languages (Sy, 25min)
- Einari Kurvinen, Rolf Lindén, Teemu Rajala, Erkki Kaila, Mikko-Jussi Laakso, and Tapio Salakoski: Automatic assessment and immediate feedback in first grade mathematics (R, 25min)
- Palle Nowack and Michael Caspersen: Model-based thinking & practice (Sh, 15min)

10.25 Refreshments

11.00 Session 2: visualisations. Chair, Juha Sorva

- Tapio Auvinen, Juha Paavola, and Juha Hartikainen: STOPS: a graph-based study planning and curriculum development tool (Sy, 25min)
- Essi Isohanni and Hannu-Matti Järvinen: Are visualization tools used in programming education? By whom, how, why, and why not? (R, 25min)
- Teemu Sirkiä: Exploring expression-level program visualization in CS1 (Sh, 15min)

12.05 Lunch

13.20 Session 3: understandings, perceptions. Chair, Jouni Ikonen

- Rebecca Vivian, Katrina Falkner, and Claudia Szabo: Can everybody learn to code? Computer science community perceptions about learning the fundamentals of programming (R, 25min)
- Thérèse Smith and Robert McCartney: Computer science students' concepts of proof by induction (R, 25min)
- Pamela Flores, Nelson Medinilla, and Sonia Pamplona: What do software design students understand about information hiding? A qualitative case study (R, 25min)

14.35 Refreshments

15.10 Session 4: theory. Chair, Calkin Suero Montero

- Juha Sorva and Otto Seppälä: Research-based design of the first weeks of CS1 (R, 25min)

- Claudia Szabo, Katrina Falkner, and Nickolas Falkner: Experiences in course design using neo-Piagetian theory (R, 25min)

16.00 Program ends, spa, free discussion time and preparation for dinner

20.00 Dinner

Saturday 22 November

07.00 - 09.00 Breakfast

09.00 Keynote: Chair, Simon

- Kate Sanders, Professor, Rhode Island College, USA: Card sorts, commonsense, and thresholds: a case study in CS education research (1hr)

10.00 Refreshments

10.30 Session 5: assessment and feedback. Chair, Essi Isohanni

- Simon and Susan Snowdon: Multiple-choice vs free-text code-explaining examination questions (R, 25min)
- Martijn Stegeman, Erik Barendsen, and Sjaak Smetsers: Towards an empirically validated model for assessment of code quality (R, 25min)

11.20 Book launch: Chair, Simon

- Matti Tedre: The science of computing: shaping a discipline (10min)

11.30 Fish tank

12.00 Lunch and free time for exploring the Koli National Park

15.15 Poster session, refreshments

- Daniel S McCain, Christos Sakalis, and Arnold Pears: Exploring assessment practices at university
- Nataša Grgurina, Erik Barendsen, Bert Zwaneveld, Klaas van Veen, and Idzard Stoker: Computational thinking skills in Dutch secondary education: exploring pedagogical content knowledge
- Antti Knutas, Jouni Ikonen, Laura Ripamonti, Dario Maggiorini, and Jari Porras: A study of collaborative tool use in collaborative learning processes
- Claudia Ott, Anthony Robins, and Kerry Shephard: An infographic to support students' self-regulated learning
- Minna Kivihalme, Jaakko Leikko, and Ohto Rainio: An animated series about programming

16.15 Session 6: novices. Chair, Nick Falkner

- Arto Vihavainen, Juha Helminen, and Petri Ihanola: How novices tackle their first lines of code in an IDE: analysis of programming session traces (R, 25min)
- André Santos: Novel interaction metaphors for object-oriented programming concepts (Sy, 25min)
- Robert McCartney and Kate Sanders: First-year students' social networks: learning computing with others (Sh, 15min)

17.20 Program ends; free discussion time and preparation for dinner

17.20 – 18+ PC meeting

19.00 Christmas party dinner

20.00 Sauna* available until 23:00

Sunday 23 November

08.00 - 09.00 Breakfast; *hotel checkout for those who are ready*

09.00 Session 7: e-learning. Chair, Robert McCartney

- Nickolas Falkner and Katrina Falkner: “Whither, badges?” or “Wither, badges!”: a metastudy of badges in computer science education to clarify effects, significance and influence (R, 25min)
- Judy Sheard, Anna Eckerdal, Päivi Kinnunen, Lauri Malmi, Aletta Nylén, and Neena Thota: MOOCs and their impact on academics (R, 25min)
- Calkin Suero Montero and Jarkko Suhonen: Emotion analysis meets learning analytics – online learner profiling beyond numerical data (Sh, 15min)

10.05 Refreshments; *hotel checkout for those who are ready*

10.40 Session 8: program chairs

- Simon, outgoing chair: special session (30min)
- Päivi Kinnunen: closing session (30min)

12.00 Lunch; *hotel checkout for those who are ready*

13.00 Departure

- 13.00 *Hotel checkout for those who have not yet done so*
- 13.30 *Departure from Koli*
- 15.00 *Joensuu Railway Station (IC10 to Helsinki (& Pasila/Turku), 15.17; RT724 to Pieksämäki (Tampere), 15.20)*
- 15.30 *Joensuu Airport (AY2490 to Helsinki, 17.45)*
- 16.00 *Joensuu Science Park*

* Relax Spa and Sauna

The sauna has always been part of Koli Calling, and will continue to be so. The sauna will be freely available on the Saturday night at the times indicated above, and free drinks will be available in the sauna as part of the conference package.

The hotel also has a spa. This is normally available throughout the day (for all hotel guests) until 20.00.

One visit to the spa is included in the conference package. Numbers in the spa are limited, so we have allocated the time slot of 1600-2000 on Friday as the principal spa time for delegates. People will be required to pay the hotel for any additional visits. On the other hand, we will possibly be able to negotiate a small reduction in the accommodation cost for people who do not want to use the spa at all.