Koli Calling 2019 Program

Note: Long papers are 20+5 minutes, short papers are 15+5

Thursday, November 21

Bus 1 from Joensuu to Koli
- 16:45 Joensuu Science Park (UEF, School of Computing, Länsikatu 15, 80100 Joensuu)
- 17:15 Joensuu Airport (the bus will wait for the participants arriving with the flight AY345 at 17:15)
- 17:50 Joensuu Railway Station (the bus will wait for the participants arriving with the train InterCity 5 at 17:50)
- 19:30 Arrival at Koli, hotel check-in
- 20:00 Welcoming buffet available in the hotel restaurant

Bus 2 from Joensuu to Koli
- 19:30 Joensuu Railway Station (the bus will wait for the participants arriving with the train InterCity 7 arriving at 19:36)
- 21:15 Arrival at Koli, hotel check-in, welcoming buffet available in the hotel restaurant

Friday, November 22

07.00 – 08.50 Breakfast (at the Sokos Hotel Koli Restaurant)

09:00 Opening Session: Petri Ihantola, Nick Falkner

09:10 Session 1: Concepts and Understanding, Chair: Lauri Malmi
1. Assessing students' understanding of object structures: Andreas Muehling, Carsten Schulte, Lea Budde, Jens Bennedsen and Gregor Große-Böltling
2. "It’s like computers speak a different language": Beginning Students' Conceptions of Computer Science (short paper): Gregor Große-Böltling, Yannick Schneider and Andreas Mühling

10:15 Short break

10:30 Session 2: Curriculum and Course Design, Chair: Juha Sorva
4. An International Comparison of K-12 Computer Science Education Intended and Enacted Curricula: Katrina Falkner, Sue Sentance, Rebecca Vivian, Sarah Barksdale, Leonard Busuttil, Elizabeth Cole, Christine Liebe, Francesco Maiorana, Monica M. McGill and Keith Quille
5. Body of Knowledge Explorer - Long-Term Student Guidance Across the Computer-Science Domain (short paper): Vangel Ajanovski
6. Investigating the Affect and Effect of Adaptive Parsons Problems: Barbara Ericson, Austin McCall and Kathryn Cunningham

12:00 Lunch (Sokos Hotel Koli restaurant)

13:00 Session 3: K-12, Chair: Barbara Ericson
9. An Examination of Abstraction in K-12 Computer Science Education: Christine Liebe and Tracy Camp
10. Machine Learning for High School Students: Radu Mariescu-Istodor and Ilkka Jormanainen

14:15 Short break

14:30 Session 4: Metacognition and Computational Thinking, Chair: Calkin Suero Montero
12. A Systematic Review of Computational Thinking Approach for Programming Education in Higher Education Institutions: Friday Agbo, Solomon Oyelere, Jarkko Suhonen and Sunday Adewumi
13. Prediction as a prerequisite of skilled reading: The cases of source-code and music notation: Natalia Chitalkina, Roman Bednarik, Marjana Puurtinen and Hans Gruber

15:45 Coffee break (Sokos Hotel Koli restaurant restaurant)

16:00 Session 5: Motivation and Skill Development, Chair: Judy Sheard
15. Enhancing research skills in undergraduate students through seminars (short paper): Richard Gault and Angela Allen
16. IoT-Poly: An IoT Security Game Practice Tool for Learners Motivation and Skills Acquisition: Tan Omiya, Doudou Fall and Youki Kadobayashi

17:10 Lightning Pitches
- Evaluating Cybersecurity-Related Competences through Serious Games: Sten Mäses
- Personalized, Adaptive Tutorials for Program Tracing Skills: Greg Nelson
- Students’ Views of Concurrency and Synchronization: Filip Strömbäck
- To Ease the Transition to Employment: Employability in Higher IT Education: Gunhild Lundberg

17:20 Program ends for the day

17:30 Optional Spa visit and parallel social program

20:00 Dinner buffet (Sokos Hotel Koli restaurant)

Saturday, November 23

07.00 – 08.50 Breakfast (at the Sokos Hotel Koli Restaurant)

9:00 Keynote: Grand Challenges for Computing Education in the 21st Century: Amy J. Ko

10:10 Short break

10:25 Session 6: Feedback and Assessment, Chair: Mark Guzdial
17. Comparative Student Experiences on Electronic Examining in a Programming Course - Case C: Anni Rytkönen and Venla Virtakoivu
18. A method for adding cyberethical behaviour measurements to computer science homework assignments (short paper): Sten Mäses, Heleri Aitsam and Liina Randmann
19. Addressing Bias to Improve Reliability in Peer Review of Programming Coursework: Steven Bradley
20. Towards a validated formative assessment for language-specific program tracing skills: Greg L. Nelson, Benjamin Xie, Andrew Hu and Amy Ko

12:05 Lunch

12:50 Koli Nature Walk (short, medium, long – Free time for exploring the Koli National Park)
14:15 Coffee break (Sokos Hotel Koli restaurant)

14:40 Session 7: Posters, Chairs: Nick Falkner and Petri Ihantola
1. Aligning Competence Hierarchies with Bloom’s Taxonomies Changing the focus for computing education: David Bowers and Marian Petre
2. Splashing the surface of research: A study of Koli abstracts: Juha Sorva
5. Educating Future Scientists, Engineers, Makers and Inventors - Influence of Students' Participation in Educational Robotics Competitions on their Career Choices in STEM: Nicolai Pöhner
6. Data analytics on performance of computing students: Oluwafemi Samson Balogun, Solomon Sunday Oyelere and Donald Douglas Atsa'Am
7. Fostering Creativity Self-perception in Formal Learning through Digital Fabrication and Making: Calkin Suero Montero
8. A set of exercises and tests for teaching tracing skills using a mastery approach: Martijn Stegeman
9. Let’s Look a Layer Deeper: Design and First Results of a New Test System in the Context of Program Tracing: Morten Bastian and Andreas Mühling
10. CSINC: An Inclusive K-12 Outreach Model: Karen Nolan, Roisin Faherty, Keith Quille, Brett Becker and Susan Bergin
11. RoboCards. A Tool to Support the Organization of Robotics Camps for Beginners: Ilenia Fronza and Claus Pahl
12. On the Learning Activities and Outcomes of an Information Security Course: Timo Hynninen
13. The Effect of Civic Knowledge and Attitudes on CS Student Work Preferences: Antti Knutas and Andrew Petersen
14. Classroom Presentation of Code: an alternative peer review process: Abhimanyu Ghosh and Daniel Sinkovits
15. An inquiry-based approach for an insight on recursion and algorithm comprehension: Francesco Maiorana, Andrew Csizmadia, Gretchen Richards, Russell Feldhausen and Nathan Bean

16:00 Session 8: Teaching Programming, Chair: Nick Falkner
21. Task-Specific Programming Languages for Promoting Computing Integration (short paper): A Precalculus Example: Mark Guzdial and Bahare Naimipour
22. How is programming taught in code clubs? Exploring the experiences and gender perceptions of code club teachers: Efthimia Aivaloglou and Feliennie Hermans
23. Scratch and Google Blockly: How Girls' Programming Skills and Attitudes are Influenced: Mazyar Seraj, Eva-Sophie Katterfeldt, Kerstin Bub, Serge Autexier and Rolf Drechsler
24. Impact of Bilingual CS Education on Student Learning and Engagement in a Data Structures Course: Adalbert Gerald Soosai Raj, Hanqi Zhang, Viren Abhyankar, Saswati Mukherjee, Eda Zhang, Jim Williams, Richard Halverson and Jignesh Patel

17:35 Program ends

18:00 PC meeting (until 19:00)

19:30 Dinner (Sokos Hotel Koli restaurant)

Sauna available 21.00-23.00

Sunday, November 24

07.00 Breakfast (at the Sokos Hotel Koli Restaurant)
07:00 Check-out – finished by 8:30, please!

09:30 Departure from Koli
- 11:00 Joensuu Airport (flight AY 344 departing at 12:15)
- 11:30 Joensuu Railway station (train InterCity 8 departing at 12:13)