DOCTORAL CONSORTIUM 2023

Koli Calling '23 Doctoral Consortium: The Many Approaches to Computer Science Education

Koli Calling 2023 will organise a two-day pre-conference doctoral consortium (DC), from Wednesday 15th (morning) until Thursday 16th (afternoon) CET, November 2023 at Koli, Finland.

The doctoral consortium is organised by:

- A/Prof. Nick Falkner, School of Computer and Mathematical Sciences, The University of Adelaide, Australia
- Prof. Mats Daniels, Department of Information Technology, Uppsala University, Sweden
- Prof. Mark Guzdial, Electrical Engineering & Computer Science, University of Michigan
- Assist. Prof. Barbara Ericson, School of Information and School of Electrical Engineering and Computer Science, College of Engineering, University of Michigan
- Dr. Rebecca Vivian, School of Computer and Mathematical Sciences, The University of Adelaide, Australia

Theme

Computer Science education research covers a very wide range of topics including, but not limited to, social science, psychology, cognitive neuroscience, game theory, ethics, statistics, anthropology, and, of course, computer science. Experts in the area may have a multi-disciplinary background, which often means that Ph.D. students find that their path to a successful completion can require them to keep discovering and understanding research from an entirely new field.

The team who are organising this doctoral consortium have been brought together because they have a wide diversity of backgrounds:

- those who completed their Ph.D.s early in their career, inside a CS educational frame;
- those who were based in Computer Science and moved into education research;
- those who worked in research for some time before completing their Ph.D.s;
- and those who started in traditional K-12 education and made the transition into Computer Science education research.

This doctoral consortium provides opportunities for Ph.D. students to explore ideas and perspectives on computing education research in improving the ways that we teach, understanding how students learn computing (and the challenges to that learning), and how we evaluate the effectiveness of our teaching. We welcome submissions from participants at any stage of their doctoral studies.

Abstracts from all accepted DC participants will be published in 2023 Koli Calling proceedings under a special DC section.

Participants

The consortium is designed primarily for students who are currently enrolled in a doctoral programme with a focus on computing education research or educational technology, but will be particularly useful for students who are drawing in research from a number of discipline areas to establish new techniques or validation approaches in pedagogy. Students who aim to carry out research in the field and who have a research plan but have not yet presented the proposal for their doctoral program may apply as well. The number of participants is limited to 10.

Objectives

- To further the research agenda of the participants by providing supportive feedback within a friendly forum

- To provide a space where the participants are able to practice their communication skills by interacting and giving constructive feedback to their peers
- To create and strengthen a solid network and research community among doctoral students working on similar topics
- To foster interesting collaboration ideas/opportunities among the participants
- To support young researchers with the necessary advice regarding research and career paths

Tentative Schedule

The DC is held face-to-face at the Koli Calling main venue, located in Koli, Finland. Unfortunately, previous experience with remote participation has shown that it has limited value for this kind of activity. Successful applicants are expected to arrive in time for the DC to start and remain until the end of the face-to-face conference.

All main activities of the DC will take place between 9am – 8pm Finnish time (GMT +2). **The schedule is tentative and subject to change according to the schedule of the Koli Calling 2023 conference.**

Day 0: Tuesday 14th November

- Students arrive in Joensuu

Day 1: Wednesday 15th November

- Travelling from Joensuu to Koli
- **Doctoral consortium starts: Introductory remarks**
- Presentation of individual research
- Group and individual work
- Evening programme

Day 2: Thursday 16th November

- Summary of Day 1.
- Working with expert facilitation
- Q&A panel

- **Doctoral consortium wrap-up**

During the Koli Calling conference (16th – 18th of November)

- Participation in the poster session at Koli Calling Conference
- Special doctoral consortium activities during the conference with input from the conference participants

Accommodation and Meals

Free accommodation and meals are preliminarily arranged in shared twin rooms at the Koli Resort. For private rooms at the participant's cost, there are a wide variety of choices in Koli National Park from which transport can be arranged; please contact the organizers for a list of nearby options. Travelling to Finland / Koli is necessary for participation, there will not be means for online communication for the DC.

Proposal Submission

Each candidate should submit:

1. A two-page abstract of their research using the poster submission template from Koli Calling website (see https://www.kolicalling.fi/call-for-papers/)
2. A brief 1-page bio including information about previous studies, previous research topics, publications if any, and possible teaching experience or pedagogical studies
3. A max 1-page list of questions and topics related to your own study that you would like to discuss with the other participants and get feedback on during the doctoral consortium

Submission Deadline and Procedure

All deadlines are Anywhere on Earth (AoE), which is UTC-12.

- Submission deadline: July 7
- Notification of acceptance: latest by July 14

- Contributions should be submitted in **PDF format** to the EasyChair submission system. **Please select the Koli Calling DC track when making the submission.** If necessary, you can make a zip package of the separate files.

Review Process

The review and decision of acceptance will take into account the following factors:

- Novelty of the proposal/work
- Quality and clarity of the contribution
- Potential value of the work to other members of the doctoral consortium

Confidentiality of submissions will be kept throughout the review process. Each proposal receives at least three reviews.

For more information please contact A/Prof Nick Falkner (firstname dot lastname at adelaide dot edu dot au) with the subject "Koli DC question".