

Call for Contributions

1. Inform the Chair

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=eLmL+2021+Special>

Please select Track Preference as **LECILA**

3. Note: *For 2021, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.*

Special track

LECILA

Learning Engineering: Courseware Instrumentation and Learning Analytics

Chair

Erin Czerwinski, Manager, Learning Engineering and Technology Enhanced Learning Product Carnegie Mellon University, US

czerwinski.erin@gmail.com

Simon Initiative

<https://www.cmu.edu/simon/>

along with

eLmL 2021: The Thirteenth International Conference on Mobile, Hybrid, and On-line Learning

<https://www.iaia.org/conferences2021/eLmL21.html>

July 18, 2021 to July 22, 2021 - Nice, France

Learning Engineering, as defined by the IEEE Industry Connections (IC) Industry Consortium for Learning Engineering (ICICLE), is, “a process and practice that applies the learning sciences using human-centered engineering design methodologies and data-informed decision-making to support learners and their development.”¹ More than instructional design, learning engineering adds data-informed decision-making to the toolkit of instructional and learning experience design. Learning engineering encompasses several specialties inherent in supporting learners and their stakeholders. It brings together expertise from learning science, learning experience design, software engineering for learning environments and learning activities, data science, educator knowledge, domain knowledge, and assessment/measurement/evaluation.

The main idea of LECILA is to highlight the different ways in which learning engineering is used in different contexts, celebrate, and inform others of the accomplishments gained through the learning engineering process. The special track is supported by the Simon Initiative to showcase the work of learning designers, educators, technologists, and data specialists. We welcome papers and participation from anyone who is using data to perform iterative improvement of online courses and materials.

¹ IEEE, ICICLE. (2020). What is Learning Engineering? Retrieved 4/12/2021 from: <https://sagroups.ieee.org/icicle>

Topics include, but not limited to

- Learning engineering best practices
- Learning engineering for courseware development
- Online learning design and development
- Learning engineering process
- Learning science
- Learning experience design
- Teaching with online materials and platforms
- Courseware curriculum: design and development
- Courseware instrumentation
- Learning-data collection
- Learning analytics
- Iterative improvement of courseware
- Learning principles in action for online learning
- Tools and methods for learning analytics
- Evidence-based design and iterative improvement models
- Artificial Intelligence for learning design
- Multimedia development for online courseware
- Universal Design for Learning (UDL)
- Accessibility considerations for online learning environments
- Machine-learning techniques in learning design
- Learning design for mobile devices
- Sensing, sensory systems, and sensor networks
- Adaptive and personalized learning
- Student modeling
- Cognitive models for learning
- Intelligent tutoring systems
- E-learning and mobile learning
- Social media and learning
- Computer-supported collaborative learning
- Big data in education and learning analytics
- Smart learning environments
- Instrumented virtual and augmented reality in education
- Learning management systems
- Content management systems
- Interoperability of systems for LE
- Learning technologies for students with special needs
- Ethics in learning engineering
- Learning Engineering for diversity and inclusion

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaaria.org]
- Presentations: slide only [slide-deck posted on www.iaaria.org]
- Demos: two pages [posted on www.iaaria.org]

Important Datelines

Inform the Chair or Coordinator: As soon as you decide to contribute

Submission: June 4, 2021

Notification: June 20, 2021

Registration: July 1, 2021

Camera ready: July 1, 2021

Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.

Paper Format

- See: <http://www.iaia.org/format.html>

- Before submission, please check and comply with the editorial rules: <http://www.iaia.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>

- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>

- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iaiasubmit.org/conferences/submit/newcontribution.php?event=eLmL+2021+Special>

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at <http://www.iaia.org/registration.html>

Contact

Chair: Erin Czerwinski, czerwinski.erin@gmail.com

Logistics: steve@iaia.org