

Call for Papers

EDM 2020: the 13th International Conference on Educational Data Mining

ifrane, Morocco, Fully virtual conference, July 10-13, 2020

<http://educationaldatamining.org/edm2020/>

Improving Learning Outcomes for All Learners

Educational Data Mining is a leading international forum for high-quality research that mines datasets to answer educational research questions, including exploring how people learn and how they teach. These data may originate from a variety of learning contexts, including learning and information management systems, interactive learning environments, intelligent tutoring systems, educational games, and data-rich learning activities. Educational data mining considers a wide variety of types of data, including but not limited to raw log files, student-produced artifacts, discourse, and multimodal streams such as eye-tracking and other sensor

data. The overarching goal of the Educational Data Mining research community is to support learners and teachers more effectively, by developing data-driven understandings of the learning and teaching processes in a wide variety of contexts and for diverse learners.

The theme of this year's conference is "Improving Learning Outcomes for All Learners". The theme comprises two parts: (1) Identifying **actionable** learning or teaching strategies that can be used to **improve** learning outcomes. (2) Using EDM to promote more **equitable** learning across diverse groups of learners. For this 13th iteration of the conference we specifically welcome research that advances these areas.

Topics of interest

Topics of interest to the conference include but are not limited to:

- Causal inference of which factors impact -- not just predict -- students' learning.
- Developing and applying fairer learning algorithms that exhibit similar performance across subgroups of students, and detecting instances of algorithmic unfairness in existing methods.
- Replicating previous studies with larger sample sizes, in different domains, and/or in more diverse contexts.

- Modeling student and group interactions for collaborative and/or competitive problem-solving.
- EDM for gamification and in educational games.
- Deriving representations of domain knowledge from data.
- Modeling real-world problem-solving in open-ended domains.
- Modeling and detecting students' affective and cognitive states (e.g., engagement, confusion) with multimodal data.
- Ethical considerations in EDM.
- Closing the loop between EDM research and educational outcomes to yield actionable advice.
- Informing data mining research with educational and/or motivational theory.
- Developing new techniques for mining educational data.
- Data mining to understand how learners interact in formal and informal educational contexts.
- Bridging the gap between data mining and learning sciences.
- Legal and social policies to govern EDM.
- Automatically assessing student knowledge.
- Social network analysis of student and teacher interactions.

Submission Types

For all tracks, **the references section at the end of the paper does not count towards the listed page limits.**

- **Full Papers** – 10 pages. Should describe original, substantive, mature, and unpublished work.
- **Short Papers** – 6 pages. Should describe original, unpublished work. This includes early stage, less developed works in progress.
- **JEDM Journal Track Papers** – Papers submitted to the Journal of Educational Data Mining track (and accepted before April 9th) will be published in JEDM and presented during the JEDM track of the conference.
- **Industry Papers** – 6 pages. Should describe innovative uses of EDM techniques in a commercial setting.
- **Doctoral Consortium** – 2-4 pages. Should describe the graduate/postgraduate student's research topic, proposed contributions, results so far, and aspects of the research on which advice is sought.
- **Posters/Demos** – 2-4 pages. Posters should describe original unpublished work in progress or last-minute results. Demos should describe EDM tools and systems, or educational systems that use EDM techniques.

JEDM track papers should be formatted according to the JEDM guidelines and should be submitted to the journal directly at:

<https://jedm.educationaldatamining.org/index.php/JEDM/about/submissions>

All other papers should be formatted according to the EDM template:

- Word:
http://educationaldatamining.org/edm2020/wp-content/uploads/sites/4/2019/09/edm_word_template2020.doc
- LaTeX:
http://educationaldatamining.org/edm2020/wp-content/uploads/sites/4/2019/09/edm_submission2020.zip

All accepted papers will be published in the open-access proceedings of the conference, with the exception of the Journal track as stated above. All paper submissions must be submitted for double-blind reviewing.

Workshops and Tutorials

We invite workshops and tutorials (to be held on July 10) on important topics for the EDM community, including especially emerging subfields. Workshop proposals (2-4 pages) should describe the organizers' plan both to conduct

the workshop (e.g., format, rough schedule, proposed list of speakers) as well as to stimulate growth in the workshop's area of focus.

Tutorial proposals (2-4 pages) should motivate and describe succinctly the field or tool that will be presented, as well as a plan for attendees to learn it in a hands-on way.

Important Dates

JEDM track papers	December 20, 2019, 11:59 PM PST
Workshop and Tutorial proposals	February 3, 2020, 11:59 PM PST (Extended)
Acceptance notifications for workshops and tutorials	February 17, 2020, 11:59 PM PST
Abstracts for full and short papers	March 3, 2020, 11:59 PM PST (extended)
Full and short papers	March 9, 2020, 11:59 PM PST (extended)
Industry papers	March 9, 2020, 11:59 PM PST (extended)
Posters and demos	March 26, 2020, 11:59 PM PST (extended)

Doctoral consortium papers	April 13, 2020, 11:59 PM PST (extended)
Acceptance notifications for full and short papers	May 5, 2020, 11:59 PM PST (extended)
Acceptance notifications for posters, demos, and doctoral consortium papers	April 24, 2020, 11:59 PM PST (extended)
Camera-ready copy due	May 30, 2020, 11:59 PM PST (extended)
Due dates and acceptance notifications for workshop papers	Set by workshop organizers

Organizing team

General chairs:

Violetta Cavalli-Sforza (Al Akhawayn University, Morocco)

Cristobal Romero (University of Cordoba, Spain)

Program chairs:

Anna Rafferty (Carleton College, USA)

Jacob Whitehill (Worcester Polytechnic Institute, USA)

Hope to see you all at EDM 2020 in Ifrane, Morocco!