1st International Workshop on Navigating Success through Intellectualization of Educational Trajectories (IntelEdu-2024)

Co-located with the 19th International Conference on **ICT** in **E**ducation, **R**esearch, and **I**ndustrial Applications (<u>ICTERI 2024</u>)

September 23, 2024 / Ukrainian Catholic University, Lviv – Ukraine

Workshop Outline

In recent decades, education has been subject to rapid technological development and constant innovation. A variety of research in this area covers key topics such as the use of artificial intelligence (AI), digital technologies, personalized learning and virtual environments. The dominant trend today is that the introduction of AI into educational processes provides unique opportunities to rethink traditional teaching methods and shapes out the future of education.

Research in this area seeks not only to automate routine tasks, but also to create intelligent systems that can adapt to the needs of each student. Beside it, AI is considered as an effective learning assistant. The exploration of intelligent tutoring systems and automated tutors allows us to improve teaching methods, making learning processes more interactive and accessible. Intelligent learning systems and automated tutors expand personalized learning opportunities. These approaches and underlying AI technologies provide personalized assignments and feedback to help each student reach their maximal potential.

Important Dates

(23:59 Hawaii time)

Monday, 29.05.2024 – papers submission deadline

Monday, 26.06.2024 - acceptance notification

Monday, 28.08.2024 - camera-ready papers submission deadline

Monday, 04.09.2024 - registration deadline

Monday, 23.09.2024 - workshop day

ICTERI Conference

ICTERI is an annual peer-reviewed international Computer Science conference. It focuses on research, design, development, deployment, and usage of advanced Information Systems (IS) and Information and Communication Technology (ICT) Infrastructures in industry and education. Special attention is given to the feasibility and practicality of the proposed ideas/solutions, with a focus on their potential or existing implementation. This can be demonstrated, for example, by a proof-of-concept implementation, a comprehensive prototype, a comprehensive case study, or the analysis of real use cases. Submissions on academic- industrial partnerships for ICT innovation, knowledge transfer, and technological/methodological reports are also welcome.

Workshop Theme and Topics

The purpose of the workshop is to discuss the contributions toward the effective use of AI to empower modern education and technological innovations in education. Particular attention is paid to personalized learning models, intelligent tutoring systems and automated tutors, including the creation of hybrid models in deep learning. In addition, the workshop is aimed at studying the possibilities of using blockchain technology in open learning, as well as in smart classrooms and virtual learning environments. The overall goal of the event is to encourage innovations in education and promote the effective use of modern AI technologies in educational processes.

The workshop covers the following topics:

- Al and ML in Education Process:
- Intelligent Tutoring System and Automated Tutors;
- Al in Smart Classrooms and Virtual Learning Environments;
- Technologies for Virtual and Remote Virtual Laboratories (VR);
- The impact of the use of blockchain technology in education and open learning.

The workshop seeks to accomplish the following objectives:

- Transforming AI into an Effective Learning Assistant: Strategies and Implementation
- Strategies and Models for Implementing AI at Schools and in Higher Education
- Unleashing the Potential of AI in Education: Focusing on the integration of AI in educational processes, the workshop aims to unravel the opportunities and challenges associated with leveraging AI for enhanced learning experiences.
- Advancing Intelligent Tutoring Systems: With a specific focus on Intelligent Tutoring Systems and Automated Tutors, the workshop aims to advance discussions on personalized and adaptive learning.
- Decentralized Learning Management Systems (DLMS)
- Blockchain-Based Learning Analytics

Submission Types and Requirements

IntelEdu invites high-quality submissions on all topics related to this workshop. Submissions can fall in one of the following categories.

1. Regular (full) research papers

The papers in this category are the reports on the accomplished research work; they present a novel method, technique, or analysis with appropriate empirical or other type of evaluation as a proof of validity.

Evaluation criteria: originality, technical soundness, the soundness of the problem analysis, the soundness of the real-use demonstration.

Page limit: 12-16 LNCS pages.

2. Short research papers

The papers in this category are the short reports of the preliminary results or describing the work in progress.

Evaluation criteria: originality, technical correctness, and potential value of the planned results in a short to mid-term perspective

Page limit: 10-12 LNCS pages.

3. Education experience papers

The papers in this category report on industrial or academic deployments of novel ICT, experiences in the effective/efficient use of novel ICT in education.

Evaluation criteria: significance and practical relevance, technical soundness, and accompanying evaluation or industrial validation.

Page limit: 12-16 LNCS pages

Publications

The papers, that adhere to the workshop's criteria, will undergo the peer review by the program committee of IntelEdu. Accepted papers will be included in the program of the workshop for their presentation.

Workshop organizers will apply for the publication of accepted and presented papers at CEUR-WS (http://ceur-ws.org/). This publication will qualify as an international publication with

ISBN. This proceedings volume will be published electronically and indexed by Scopus and Google Scholar.

Workshop Chairs

Oleksandr Spivakovsky spivakovsky@ksu.ks.ua Kherson State University,

Ukraine

Maksym Poltoratskyi mpoltoratskyi@ksu.ks.ua Kherson State University,

Ukraine

Program Committee Members

- Oleksandr LETYCHEVSKYI (V.M. Glushkov Institute of Cybernetics of the National Academy of Sciences (NAS) of Ukraine)
- Volodymyr PESCHANENKO (Kherson State University, Ukraine)
- Michael LVOV (Kherson State University, Ukraine)
- Sergii BABICHEV (Jan Evangelista Purkyne University in Usti nad Labem, Usti nad Labem, Czech Republic)
- Artem BOYARCHUK (Tallinn University of Technology (TalTech), Tallinn, Estonia)
- Frédéric MALLET (Centre Inria Sophia Antipolis Méditerranée, Sophia Antipolis, France)
- Philippe LAHIRE (University of Nice Sophia-Antipolis, France)
- Gary PRATT (Eastern Washington University, United States)
- Vitaliy KOBETS (Kherson State University, Ukraine)
- Hennadiy KRAVTSOV (Kherson State University, Ukraine)
- Yurii TRYUS (Cherkasy State Technological University, Cherkasy, Ukraine)
- Alexander WEISSBLUT (Kherson State University, Ukraine)
- Nataliia VALKO (Kherson State University, Ukraine)
- Lyubov PETUKHOVA (Kherson State University, Ukraine)
- Maksym VINNYK (Kherson State University, Ukraine)
- Nataliya KUSHNIR (Bogdan Khmelnitsky Melitopol State Pedagogical University, Ukraine)
- Mykola KOZLENKO (Vasyl Stefanyk Precarpathian National University, Ukraine)
- Vladyslav KRUGLYK (Bogdan Khmelnitsky Melitopol State Pedagogical University, Ukraine)
- Oleksandr LEMESHCHUK (Kherson State University, Ukraine)
- Yuliia TARASICH (V.M. Glushkov Institute of Cybernetics, Ukraine)
- Serhii VOLOSHYNOV (Kherson State Maritime Academy, Ukraine)
- Vlad IATSIUTA (DataArt, Ukraine)

Presentation

The authors, whose papers are accepted, must register for and participate in the workshop. They commit to present their accepted paper at the IntelEdu Workshop, in English. The accepted papers that have not been presented at IntelEdu will be excluded from publication.