

## LPAIA 2022

### Special Session on Learning patterns/methods in current AI applications

at the 14<sup>th</sup> Asian Conference on Intelligent Information and Database Systems (ACIIDS 2022)

Almaty, Kazakhstan, June 6-9, 2022

Conference website: <http://www.aciids.pwr.edu.pl/>

### Special Session Organizers

**Prof. dr hab. Urszula Boryczka**

Institute of Computer Science

University of Silesia, Poland

E-mail: [urszula.boryczka@us.edu.pl](mailto:urszula.boryczka@us.edu.pl)

**Prof. dr hab. Piotr Porwik**

Institute of Computer Science

University of Silesia, Poland

E-mail: [piotr.porwik@us.edu.pl](mailto:piotr.porwik@us.edu.pl)

### Objectives and topics

Machine learning is a subfield of artificial intelligence, which is broadly defined as the capability of a machine to imitate intelligent human behavior. Artificial intelligence systems are used to perform complex tasks in a way that is similar to how humans solve problems. The goal of AI is to create computer models that exhibit „intelligent behaviors” like humans. This means machines that can recognize a visual scene, understand a text written in natural language, or perform an action in the physical world in an optimal manner. Machine learning is one way to use AI. It was defined in the 1950s as the field of study that gives computers the ability to learn without explicitly being programmed.

Machine learning is a large field of study that overlaps with and inherits ideas from many related fields such as artificial intelligence. The focus of the field is learning, that is, acquiring skills or knowledge from experience. Most commonly, this means synthesizing useful concepts from historical data.

As such, there are many different types of learning that we may encounter as a practitioners in the field of machine learning: from whole fields of study to specific techniques. We want to focus on fields of study, such as supervised, unsupervised, and reinforcement learning, hybrid types of learning, such as semi-supervised and self-supervised learning and finally on broad techniques, such as active, online, and transfer learning.

#### Learning Problems

- Supervised Learning
- Unsupervised Learning
- Reinforcement Learning

#### Hybrid Learning Problems

- Semi-Supervised Learning
- Self-Supervised Learning
- Multi-Instance Learning

#### Statistical Inference

- Inductive Learning

- Deductive Inference
- Transductive Learning

### Learning Techniques

- Multi-Task Learning
- Active Learning
- Online Learning
- Transfer Learning
- Ensemble Learning

### Important dates

Submission of papers: **January 15, 2022 (EXTENDED - HARD)**

Notification of acceptance: **March 1, 2022**

Camera-ready papers: **March 15, 2022**

Registration & payment: **March 15, 2022**

Conference dates: **June 6-9, 2022**

### Program Committee (to be invited)

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### Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: **LPAIA 2022: Special Session on Learning patterns/methods in current AI applications** <https://easychair.org/conferences/?conf=aciids2022>

Authors are invited to submit original previously unpublished research papers written in English, of up to 13 pages, strictly following the LNCS/LNAI format guidelines. Authors can download the Latex (recommended) or Word templates available at [Springer's web site](#). Submissions not following the format guidelines will be rejected without review. To ensure high quality, all papers will be thoroughly reviewed by the LPAIA 2022 Program Committee. All accepted papers must be presented by one of the authors who must register for the conference and pay the fee. The conference proceedings will be published by Springer in the prestigious series LNCS/LNAI (indexed by ISI CPCI-S, included in ISI Web of Science, EI, ACM Digital Library, dblp, Google Scholar, Scopus, etc.).