# AIAI 29th Irish Conference on Artificial Intelligence and Cognitive Science (AICS 2021)

December 9-10th 2021 University College Dublin (UCD) https://aics2021.ucd.ie



The 29th Irish Conference on Artificial Intelligence and Cognitive Science (AICS2021) will be hosted by the School of Computer Science at University College Dublin (UCD) and will take place from 9th to 10th December 2021. The conference is currently being planned as an online event but will move to a hybrid event if public health advice allows it.

This year, we will also invite selected papers to be extended and submitted to a special issue in The Wiley Journal Expert Systems: The Journal of Knowledge Engineering.

With regular conferences dating back to 1988, the AICS Conference is Ireland's primary forum for researchers with interests in the fields of Artificial Intelligence and Cognitive Science. While once a niche area, the fields of Cognitive Science and Artificial Intelligence -encompassing Data Analytics, Information Retrieval, and Machine Learning - are now at the forefront of Irish computing in research and industry.

### **Submissions**

The Program Committee of AICS2021 invites submissions in the broad areas of Artificial Intelligence and Cognitive Science. Areas of interest include, but are not restricted to:

### **Machine Learning**

- Supervised Learning
- Ensemble methods
- Meta-Learning
- Reinforcement Learning etc.

#### **Cognitive Science**

- Decision Making,
- Perception
- Concept
   Combination
- Creative Cognition etc.

#### **Applications**

- Computer Vision
- Natural Language Processing
- Speech Processing
- Recommender
   Systems
   etc.

### Deep Learning

- Network
   Architectures
- Deep Generative Modelling
- Graph Neural Networks etc.

#### Al Ethics

- Fairness, Interpretability
- Transparency
- Explainability
- Moral Judgement etc.

## **Learning Theory**

- Optimisation
- Bayesian Methods
- Game Theory
- Complexity
   Analysis etc.

#### **Semantic Web**

- Knowledge Graphs
- Social Network Analysis etc.

We also seek papers that report on in-use experiences (design, engineering, deployment, utility, and challenges) of Al-based systems. Application-centric papers in related domains such as opinion mining, adaptive information systems, robotics, chatbots, game-playing, visual analytics, intelligent infrastructures, digital twins, and smart environments are welcome. We invite three types of submissions:

- Full Paper Track: Full paper submissions should consist of original contributions (describing either fundamental research, interesting applications, in-use experiences, or reviews of the field) not published in other forums. Papers should be 6 to 12 pages in length in the Springer LNCS style. Accepted submissions will appear in online proceedings and authors will be invited for oral or poster presentations.
- Student Track: This track is designed to facilitate students who have recently completed a Bachelor's or Master's program. Student track submissions should consist of original contributions (describing either basic research or interesting applications) and the first author must be a student. Papers should be 6 to 12 pages in length in the Springer LNCS style. Accepted submissions will appear in the online proceedings and authors will be invited for a poster presentation.
- NECTAR Track: NECTAR track submissions should describe significant results
  previously published or disseminated no earlier than 2016 at a prestigious
  international conference or journal. Accepted submissions will be included in online
  proceedings as a single-page abstract, and authors will be invited to present their
  work orally at AICS.

All accepted submissions in Full Paper Track and Student Paper Track will appear in online proceedings published at <a href="www.ceur-ws.org">www.ceur-ws.org</a>.

# **Journal Special Issue**

Authors of a selection of accepted papers will be invited to submit an extended version to a dedicated special issue of <u>The Wiley Journal Expert Systems: The Journal of Knowledge Engineering</u>. Dates, deadlines, and details to be announced.

## **Publication and Instructions for Authors**

All accepted submissions will be presented at the conference, either orally or as posters, and included in the online conference proceedings. At least one author of each submission will be required to register for, and attend, the conference. All submissions must be made via the EasyChair system online at <a href="https://easychair.org/conferences/?conf=aics2021">https://easychair.org/conferences/?conf=aics2021</a>

Full papers and student papers must be submitted in <u>Springer LNCS format</u> (single column proceedings), which is also the format required for the final camera-ready copy. A sample LaTeX document in this format is <u>available here</u>.

NECTAR track submissions should consist of a single page with an abstract and reference to the original publication. A sample NECTAR track submission is <u>available here</u>.

All accepted submissions in Full Paper Track and Student Paper Track will appear in online proceedings published at <a href="www.ceur-ws.org">www.ceur-ws.org</a>.

# **Important Dates (extended)**

Note that there will be **no** further extensions of the deadlines below.

- Paper Submission Deadline for all Tracks 1st October 2021 15th October 2021,
   23:59 Irish time
- Acceptance Notification for all Papers 29th October 2021
- Camera Ready Submissions (all tracks) 12th November 2021 26th November 2021

## **Organisation**

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### **Contacts**

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