



## 2<sup>nd</sup> Call for Papers: SACAIR 2023

### SACAIR 2023 Conference Committee

The Organising Committee of the South African Conference for Artificial Intelligence Research **SACAIR** invites the submission of **full papers** and **extended abstracts in the Responsible and Ethical AI (Philosophy and Law) track only** for presentation at the conference. The conference is hosted by the University of Johannesburg this year and will be held at [26 Degrees South](#), Johannesburg, South Africa, from the 4th to the 8th of December 2023.

The conference theme is '*Human-Centred Artificial Intelligence*'.

The series of conferences, held since 2019, aims to promote research in Artificial Intelligence and provide a platform for researchers and practitioners from academia and industry to meet and share cutting-edge developments in the field. The conference seeks notable contributions to all major areas of Artificial Intelligence in both theoretical, application and practical aspects while encouraging inter- and transdisciplinary submissions.

### Conference Structure

4 December 2023:	Student unconference
5 December 2023:	Tutorials
6–8 December 2023:	Conference

### Conference Tracks and Scope

Due to its multi-disciplinary nature, the conference will be organised around discipline-specific tracks. We solicit original research submissions for the following five tracks.

1. **Algorithmic and Data-Driven AI (Computer Science)**
2. **Symbolic AI (Knowledge Representation and Reasoning)**
3. **Socio-technical and human-centred AI (Information Systems)**
4. **Responsible and Ethical AI (Philosophy and Law / Humanities)**
5. **Inter- and transdisciplinary AI research**

Please note that the SACAIR 2023 tracks represent different academic disciplines, so please carefully select the track for your submission to ensure that experts in your field appropriately review your submission.

**Algorithmic and Data-Driven AI (Computer Science) track** – Submissions will primarily be reviewed by a **computer science (CS)** program committee, so the contribution should be a CS contribution developed according to accepted CS research strategies, whether it is algorithmic or data-driven. Topics in this track include:

- Deep Learning and Machine Learning
- Computer Vision and Image Processing
- Natural Language Processing
- Pattern Recognition
- Evolutionary Computing
- Biometrics and Cybersecurity in AI
- Explainable AI

**Symbolic AI (Knowledge Representation and Reasoning) track** – KRR experts will primarily review submissions within the **computer science (CS)** program committee, so the contribution should be in one or more of the following tracks:

- Knowledge Representation and Reasoning
- Ontologies
- Computational Logic
- Multi-agent Systems
- Agent-based Modelling
- Quantum Artificial Intelligence

**Socio-technical and human-centred AI (Information Systems) track** – An **information systems (IS)** program committee will primarily review the submission. The contribution should be developed according to accepted IS research strategies, primarily socio-technical. Please do not submit to this track if you do not have an IS contribution. Application papers such as testing an algorithm within a new software system belong to the CS track. Topics in this track include:

- AI Information Systems
- AI and Socio-Technical Systems
- Human-Centred Artificial Intelligence
- AI for and in Business, including AI adoption
- AI Supporting Sustainable Development and the Circular Economy
- AI for Development and Social Good
- Society 5.0

**Responsible and Ethical AI (Philosophy and Law) track** – Contributions should be acceptable to the Humanities or Law communities. This track, **and only this track**, will accept both full papers and extended abstracts. Both full papers and extended abstracts will undergo a double-blind peer review, and only full papers will be considered for publication in either the Springer CCIS proceedings or the online conference proceedings. Extended abstracts will be considered for presentation at the main conference. Submissions to this track can be either a full paper submission complying with the specifications below or an extended abstract in PDF format of at least 4 pages (1500+) words. Topics in this track include:

- Data Ethics
- Machine Ethics
- Ethics of Socio-robotics
- Neuro Ethics
- AI and the Law
- Responsible AI Governance

**Inter- and transdisciplinary AI research track** – Submissions should be genuinely interdisciplinary or transdisciplinary, adopting research strategies from different disciplines.

- Please include a motivation for the submission being interdisciplinary or transdisciplinary.

## Paper Submission and Review

All full papers and extended abstracts should report original research that is yet to be published and has not been submitted for publication or consideration elsewhere.

The conference follows a two-stage submission process. In the first stage, authors are required to submit a short abstract of their research. The short abstract is used for reviewer assignments and to ensure paper alignment to the track.

In the second stage, authors must submit a full paper or an extended abstract (Extended abstracts will only be considered in the **Responsible and Ethical AI (Philosophy and Law) track**). Both full papers and extended abstracts will undergo double-blind peer review, complying with the requirements of the South African DHET research output policy.

**Note: Extended Abstracts will NOT be accepted in any track other than the Responsible and Ethical AI (Philosophy and Law) track.**

Full paper submissions must be between 12 and 15 pages (with 15 pages an absolute maximum). Extended abstract submissions must be at least 4 pages long (1500+ words).

Proceedings with all accepted full papers will be available online on the SACAIR website. A selection of accepted **full papers** will appear in a volume of the Springer series – ([Communications in Computer and Information Science – CCIS](#)), accredited by the South African DHET. Previous proceedings may be perused here: [CCIS Volumes](#) and [Past conference proceedings](#).

Please ensure your full paper or extended abstract adheres to the required Springer format and submit the pdf version for review in EasyChair.

[Click here to submit abstracts and full papers in Easychair](#)

An option for open access, at an additional cost, will be available to authors.

### NOTES ON THE SUBMISSION FORMAT:

In complying with Springer publication guidelines, manuscripts may be submitted through a plagiarism-checking tool, following both submissions for review and the arrival of the files at Springer. Please see the Springer website for more information.

Detailed submission information and guidelines will be posted on the conference website. All manuscripts must be formatted using [Springer Style Files and Templates](#) in Word or Latex. Only submissions made in these formats will be considered for review.

Authors will be required to submit a signed Consent to Publish form, through which the copyright of their paper is transferred to Springer. The conference website will provide a link to the form and instructions.

## Important Dates

**Abstracts Submission:** 14 August 2023  
**Submission of Full Papers:** 28 August 2023  
**Acceptance notification:** 09 October 2023  
**Camera-ready papers:** 16 October 2023  
**Springer Submission:** 23 October 2023

## Contact Details

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## Conference Committee

### General Co-Chairs

Prof Dustin van der Haar (University of Johannesburg)  
Prof Terence van Zyl (University of Johannesburg)

### Program Co-Chairs

Dr Edgar Jembere (University of KwaZulu-Natal)  
Prof Aurna Gerber (University of Western Cape)

### Proceedings Chair

Mr Anban Pillay (University of KwaZulu-Natal)

### Publicity Chair

Mrs Margaux Bowditch (University of Johannesburg)

### UnConference Chairs

Mr Tevin Moodley (University of Johannesburg)  
Mr Sibonelo Dlamini (University of KwaZulu-Natal)  
Mr Asad Jeewa (University of KwaZulu-Natal)  
Miss Yuvika Singh (University of KwaZulu-Natal)

### Tutorials Chairs

Dr Senekane Makhamisa (University of Johannesburg)  
Prof Hima Vadapalli (University of Johannesburg)

### Track Chairs

Algorithmic and Data-Driven AI (Computer Science) track

Prof Alta de Waal (University of Pretoria)  
Mr Anban Pillay (University of KwaZulu-Natal)  
Dr Edgar Jembere (University of KwaZulu-Natal)

Symbolic AI (Knowledge Representation and Reasoning) track

Prof Giovanni Casini (ISTI- CNR)  
Prof Jesse Heynink (Open Universiteit, the Netherlands)

## Socio-technical and human-centred AI (Information Systems) track

Prof Sunet Eybers (University of South Africa)

Prof Knut Hinkelmann (FHNW University of Applied Sciences and Arts Northwestern Switzerland)

## Responsible and Ethical AI (Philosophy and Law) track

Prof Emma Ruttkamp-Bloem (University of Pretoria)

Mr Fabio Tollon (Stellenbosch University)

## Inter- and transdisciplinary AI research track

Prof Alta de Waal (University of Pretoria)

Mr Anban Pillay (University of KwaZulu-Natal)

Prof Emma Ruttkamp-Bloem (University of Pretoria)

Prof Aurona Gerber (University of Western Cape)

## **Steering Committee**

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