

Call For Papers

We invite submissions for our upcoming Special Session on **Adaptive and Trustworthy Knowledge Discovery** at The 21st International Conference on Advanced Data Mining and Applications (ADMA 2025). ADMA is a CCF-recommended conference (C series, Databases/Data Mining).

Background

The rapid expansion of interconnected data ecosystems poses new challenges in knowledge discovery, demanding both adaptability and trustworthiness. As data environments grow in complexity, ensuring reliable and robust discovery processes becomes increasingly critical. Understanding how knowledge patterns emerge and evolve across diverse contexts is essential for developing systems that maintain trustworthiness while adapting to uncertainty. The integration of adaptive and trustworthy knowledge discovery approaches shows immense potential to transform multiple domains, including finance, healthcare, cybersecurity, and industrial automation.

Aims and Scope

Modern decision-making processes increasingly rely on dynamic data environments, where both reliability and adaptability are essential. The special session aims to bring together researchers, practitioners, and industry experts to explore recent advances and challenges in adaptive and trustworthy knowledge discovery. We welcome contributions addressing various aspects, including but not limited to:

- Advanced data mining algorithms
- Big data processing and analytics
- Prediction and decision-making
- Knowledge representation and semantic understanding
- Uncertainty quantification and probabilistic modeling
- Privacy, security, and fairness in AI systems
- Cross-domain knowledge transfer and generalization
- Anomaly detection and clustering
- Federated Learning
- Applications in various domains (e.g., healthcare, industry, energy).

Formatting Guidelines

We welcome original and unpublished research contributions in English that align with the themes of AI-driven data intelligence and trustworthy knowledge discovery. Manuscripts should adhere to the **LNAI (Lecture Notes in Artificial Intelligence) format**. For templates and guidelines, refer to Springer's Author Instructions. Papers must comply with the main conference guidelines and should not exceed **15 pages** in LNAI format.

Double-Blind Review Process

All submissions will undergo a **double-blind peer review** process, ensuring that:

- Author identities and affiliations remain **anonymous** to the reviewers.
- Authors must submit blinded manuscripts without identifying information.
- Reviewers and authors should avoid any de-anonymization attempts.

Submission Guidelines

Authors are invited to submit **original research papers, case studies, and technical reports** via the CMT online submission system. When submitting, please select "**Special Session: AI-empowered Data Intelligence and Trustworthy Knowledge Discovery**".

Important Dates

- **Paper Submission Deadline:** May 8, 2025 (AoE)
- **Paper Notification:** July 27, 2025 (AoE)
- **Camera-ready Submission Deadline:** August 10, 2025 (AoE)
- **Conference Dates:** Oct 22-24, 2025 (AEST)

Organization Team

Session Chairs

- **Sikun Yang**, Great Bay University, China
- **Yang Cao**, Great Bay University, China

Technical Program Committee Members

- **Lan Du**, Monash Univeristy, Australia
- **Ming Liu**, Deakin University, Australia
- **Man Wu**, Keio University, Japan
- **Jun Zhou**, Jun Zhou, RIKEN, Japan
- **Haolong Xiang**, Nanjing University of Information Science and Technology, China