

# RELATED CONFERENCES, CALL FOR PAPERS/PARTICIPANTS

## TCII Sponsored Conferences

### WI-IAT 2023 The 2023 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology TBA

<https://www.wi-iat.com/wi-iat2023/index.html>

The 2023 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'23) provides a premier international forum to bring together researchers and practitioners from diverse fields for presentation of original research results, as well as exchange and dissemination of innovative and practical development experiences on Web intelligence and intelligent agent technology research and applications.

Web has evolved as an omnipresent system which highly impacts science, education, industry and everyday life. Web is now a vast data production and consumption platform at which threads of data evolve from multiple devices, by different human interactions, over worldwide locations under divergent distributed settings. Such a dynamic complex system demands adaptive intelligent solutions, which will advance knowledge, human interactions and innovation. Web intelligence is now a cutting-edge area which must address all open issues towards deepening the understanding of all Web's entities, phenomena, and developments.

WI-IAT'23 aims to achieve a multi-disciplinary balance between research advances in theories and methods usually associated with collective intelligence, data science, human-centric computing, knowledge management, network science, autonomous agents and multi-agent systems. It is committed to addressing research that both deepen the understanding of computational, logical, cognitive, physical, and social foundations of the future Web, and enable the development and application of intelligent

technologies. WI-IAT'23 provides a premier forum and features high-quality, original research papers and real-world applications in all theoretical and technology areas that make up the field of Web Intelligence and Intelligent Agent Technology. WI-IAT'23 welcomes research, application as well as Industry/Demo-Track paper submissions. Tutorial, Workshop and Special-Session proposals and papers are also welcome. This conference is officially sponsored by the IEEE Computer Society Technical Committee on Intelligent Informatics (TCII), Web Intelligence Consortium (WIC), ACM-SIGAI, Wilfrid Laurier University, and York University.

WI-IAT'23 will provide a broad forum that academia, professionals and industry people can exchange their ideas, findings and strategies in utilizing the power of human brains and man-made networks to create a better world. More specifically, the fields of how intelligence is impacting the Web of People, the Web of Data, the Web of Things, the Web of Trust, the Web of Agents, and emerging Web in health and smart living in the 5G Era. Therefore, the theme of WI-IAT'23 will be "Web Intelligence = AI in the Connected World".

Please refer to the conference website for further information about the venue and attendance dates.

**IEEE ICDM 2023**  
**The 23rd IEEE International Conference on  
Data Mining**  
Shanghai, China  
December 1-4, 2023  
<http://www.cloud-conf.net/icdm2023/index.html>

The IEEE International Conference on Data Mining (ICDM) has established itself as the world's premier research conference in data mining. It provides an international forum for presentation of original research results, as well as exchange and dissemination of innovative and practical development experiences. The conference covers all aspects of data mining, including algorithms, software, systems, and applications. ICDM draws researchers, application developers, and practitioners from a

wide range of data mining related areas such as big data, deep learning, pattern recognition, statistical and machine learning, databases, data warehousing, data visualization, knowledge-based systems, and high-performance computing. By promoting novel, high-quality research findings, and innovative solutions to challenging data mining problems, the conference seeks to advance the state-of-the-art in data mining.

Topics of interest at this year's conference include: Foundations, algorithms, models and theory of data mining, including big data mining. Deep learning and statistical methods for data mining; Mining from heterogeneous data sources, including text, semi-structured, spatio-temporal, streaming, graph, web, and multimedia data; Data mining systems and platforms, and their efficiency, scalability, security and privacy; Data mining for modelling, visualization, personalization, and recommendation; Data mining for cyber-physical systems and complex, time-evolving networks; and Applications of data mining in social sciences, physical sciences, engineering, life sciences, web, marketing, finance, precision medicine, health informatics, and other domains. There is also an encouragement of submissions for emerging topics of high importance, such as ethical data analytics, automated data analytics, data-driven reasoning, interpretable modeling, modeling with evolving environment, cyber-physical systems, multi-modality data mining, and heterogeneous data integration and mining.

Authors are invited to submit original papers, which have not been published elsewhere and which are not currently under consideration for another journal, conference or workshop. Paper submissions should be limited to a maximum of ten (10) pages, in the IEEE 2-column format (<https://www.ieee.org/conferences/publishing/templates.html>), including the bibliography and any possible appendices. Further information for preparing paper submissions are available on the conference website. There is a current call for papers, with the submission closing date on the 1st of July 2023 and authors notified of acceptance on September 1st. Papers must be submitted through the ICDM online submission system on the Call for Papers page on the

conference website.

IEEE ICDM 2023 will also host workshops and tutorials during the conference. Workshops are expected to be held on December 4th, with half- or full-day workshops complementing the main conference technical program through expanding new directions and applications of data mining for both practitioners and researchers in a particular field. ICDM also invites proposals for tutorials from active researchers and experienced tutors. Ideally, a tutorial will cover the state-of-the-art research, development and applications in a specific data mining direction, and stimulate and facilitate future work. Tutorials on interdisciplinary directions, novel and fast-growing directions, and significant applications are highly encouraged. Hands-on-tutorials are also encouraged, particularly ones that will allow attendees to learn a particular suite of tools, software and applications that are relevant to the data mining community. Software and tools should preferably be open-sourced and readily available to all participants.

Workshop proposals are due by March 5, 2023, while tutorial proposals are due by July 9, 2023. Both workshop and tutorial proposals must be submitted by email, with workshop proposals directed to the ICDM Workshops Chairs (emails available on the Call for Workshops page) and tutorial proposals sent to [icdm2023chairs@gmail.com](mailto:icdm2023chairs@gmail.com) with the subject line `ICDM2023_<tutorial_name>`.

Registration for the conference closes on October 15, 2023. For further questions regarding the IEEE ICDM conference, please email [ICDM2023Chairs@gmail.com](mailto:ICDM2023Chairs@gmail.com).

### ICHI 2023

#### The 11th IEEE International Conference on Healthcare Informatics

Houston, Texas, USA

June 26-29, 2023

<https://ieeichi.github.io/ICHI2023/>

The IEEE International Conference on Healthcare Informatics (ICHI 2023) is a premier community forum concerned with the application of computer science, information science, data science, and informatics principles, as well as information technology, and communication science and technology to address problems and support research in healthcare, medicine, life science, public health,

and everyday wellness. The conference highlights the most novel technical contributions to stakeholder-centered technology innovation for benefiting human health and the related social and ethical implications. ICHI 2023 will feature keynotes, a multi-track technical program including papers, posters, panels, workshops, tutorials, an industrial track, and a doctoral consortium.

Authors are strongly encouraged to submit their original contributions describing their algorithmic, methodological or empirical contributions, and theories relevant to the broader context of health informatics. Submissions can focus on one or more specific aspects of theory, design, development, evaluation, or deployment. The conference covers three tracks: Analytics, Human Factors and Systems. When submitting papers, the authors must select a track that is most appropriate for their submission. Further information about each track is available on the website.

Posters and demos are an excellent way to present innovative ideas, late-breaking work, concepts, work-in-progress, early stages of research, and preliminary results from implementation and validations to academic and industrial audience. These must also fit the three tracks and should be 1-2 pages (excluding references) in the same format as full and short papers. Workshops will be held on the day prior to the start of the main program (June 26th, 2023) and should address topics relevant to healthcare informatics. ICHI 2023 also offers a Doctoral Consortium that provides an outstanding opportunity for doctoral students working on health informatics problems to discuss their work in progress and receive feedback and guidance from Consortium mentors. There is also a call for papers for the Industry track where submissions are invited to describe practical implementations of healthcare informatics, and following the success in previous years, a call for tutorial proposals. Tutorials at ICHI 2023 will be presented by domain experts to cover current topics directly relevant to the conference theme of computing-oriented health informatics. A list of topics of interest to ICHI 2023 include health data science, health informatics, innovative technologies and implementation science. Tutorials can be half-day (3 hours) or full-day (6 hours) in length. Tutorial instructors must make a commitment to prepare tutorial materials (including slides and activities) that reflect the high-quality standard of ICHI.

All submissions for papers, posters and demos, workshops, the Doctoral Consortium, Industry track and tutorials must be made through the EasyChair system on the conference website. The deadline for all submissions is January 31, 2023.

### IEEE BigData 2023

#### The 2023 IEEE International Conference on Big Data (IEEE BigData 2023)

TBA

<https://bigdataieee.org/BigData2023/>

In recent years, “Big Data” has become a new ubiquitous term. Big Data is transforming science, engineering, medicine, healthcare, finance, business, and ultimately our society itself. The IEEE Big Data conference series started in 2013 has established itself as the top tier research conference in Big Data. The 2023 IEEE International Conference on Big Data (IEEE BigData 2023) will continue the success of the previous IEEE Big Data conferences. It will provide a leading forum for disseminating the latest results in Big Data Research, Development, and Applications.

IEEE BigData 2023 will cover topics such as Big Data Infrastructure, Big Data Science and Foundations, Big Data Search and Mining, Big Data Management, Data Ecosystem, Big Data Learning and Analytics, and Big Data Applications. Each topic covers a number of themes and sub-topics relevant to big data research.

The conference might be held in 2023. Please refer to the website for upcoming announcements and details about the date and venue for IEEE BigData 2023.

### IEEE ICKG 2023

#### ICKG 2023: 17. IEEE International Conference on Knowledge Graphs (ICKG)

Amsterdam, Netherlands

November 4-5, 2023

[https://](https://waset.org/knowledge-graphs-conference-in-november-2023-in-amsterdam)

<https://waset.org/knowledge-graphs-conference-in-november-2023-in-amsterdam>

International Conference on Knowledge Graphs (ICKG) aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Knowledge

Graphs. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Knowledge Graphs.

Prospective authors are kindly encouraged to contribute to and help shape the conference through submissions of their research abstracts, papers and e-posters. Also, high quality research contributions describing original and unpublished results of conceptual, constructive, empirical, experimental, or theoretical work in all areas of Knowledge Graphs are cordially invited for presentation at the conference. The conference solicits contributions of abstracts, papers and e-posters that address themes and topics of the conference, including figures, tables and references of novel research materials. The call for papers cover themes such as: Automatic and semi-automatic creation of knowledge graphs; Data integration, disambiguation, schema alignment; Collaborative management of knowledge graphs; Quality control: noisy data, uncertainty, incomplete information; New kinds of knowledge graphs: common-sense, visual knowledge; Architectures for managing big graphs; Expressive query answering; Reasoning with large-scale, dynamic data; Data dynamics, update, and synchronization; Synthetic graphs and graph benchmarks; Innovative uses of knowledge graphs; Understanding and analyzing knowledge graphs; Semantic search; Question answering; and Combining knowledge graphs with other information resources.

All submitted conference papers will be blind peer reviewed by three competent reviewers. ICKG has teamed up with the Special Journal Issue on Knowledge Graphs. A number of selected high-impact full text papers will also be considered for the special journal issues. All submitted papers will have the opportunity to be considered for this Special Journal Issue. The paper selection will be carried out during the peer review process as well as at the conference presentation stage. Submitted papers must not be under consideration by any other journal or publication. The final decision for paper selection will be made based on peer review reports by the Guest Editors and the Editor-in-Chief jointly. Selected full-text papers will be published online free of charge.

The deadline for Abstracts and Full-Text Paper submissions is January 31, 2023. All

submissions should be through the conference website, where there are submission guides for Papers and Abstracts, and further Author Information. The Early bird registration deadline for the conference is October 4, 2023.

**AAMAS 2023**  
**The 22nd International Conference on**  
**Autonomous Agents and Multi-Agent Systems**  
 London, England  
 May 29-June 2, 2023  
<https://aamas2023.soton.ac.uk/>

Autonomous Agents and Multiagent Systems (AAMAS) is the largest and most influential conference in the area of agents and multiagent systems, bringing together researchers and practitioners in all areas of agent technology and providing an internationally renowned high-profile forum for publishing and finding out about the latest developments in the field. AAMAS is the flagship conference of the non-profit International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS).

After three years of virtual AAMAS conferences, many in the research community are eager for an in-person AAMAS conference once again. While virtual interactions are a reasonable substitute when used appropriately, they still lack key facets and benefits that in-person interactions offer. For those unable to travel to London due to personal health constraints or traveling restrictions, AAMAS will provide limited support to enable authors to present their work remotely for those who really cannot travel to the in-person event. The conference also plans to live stream the sessions using low-cost solutions. There will not be any support for other online infrastructure, such as a virtual platform or GatherTown. Should the COVID-19 situation worsen over the coming months to make a physical gathering in London unfeasible, AAMAS will transition the conference to either a virtual or hybrid setting.

Notifications were sent on 4 January. Out of 1015 submissions, 237 were accepted as full papers and a further 221 were accepted as extended abstracts. Therefore, the conference has an acceptance rate of 23.3% for full papers and 45.1% for full papers + extended abstracts. Papers are associated with 10 areas of interest,

including: Coordination, Organisations, Institutions, and Norms; Markets, Auctions, and Non-Cooperative Game Theory; Social Choice and Cooperative Game Theory; Knowledge Representation, Reasoning, and Planning; Learning and Adaptation; Modelling and Simulation of Societies; Humans and AI / Human-Agent Interaction; Engineering Multiagent Systems; Robotics, and Innovative Applications. The list of accepted papers is available at: <https://aamas2023.soton.ac.uk/program/accepted-papers/>.

AAMAS 2023 will feature Tutorials, Demos, Competitions, the Doctoral Consortium, a JAAMAS track for presentation of articles that have appeared or been accepted for publication in the Journal of Autonomous Agents and Multi-Agent Systems, and the Blue Sky Ideas special track for visionary ideas, long-term challenges, new research opportunities, and controversial debate. The conference also features a workshop program, to be held on May 29-30, immediately prior to the main program of the AAMAS conference. The objective of the AAMAS 2023 workshop program is to stimulate and facilitate discussion, interaction, and comparison of approaches, methods, and ideas related to specific topics, both theoretical and applied, in the general area of Autonomous Agents and Multiagent Systems. The list of accepted workshops is available on the conference website. This year also features a workshop on diversity and inclusion, with the Multiagent Systems for Diversity and Inclusion (MSDI) workshop dedicated to discussing the conception and deployment of inclusive MAS.

Accommodation booking is now open, with TFI Lodestar the official accommodation partner of AAMAS and ICRA. There are plenty of options for discounted individual and group bookings. If you plan to use this service for booking your accommodation, please reserve your rooms no later than February 19, 2023.

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**AAAI 2023**  
**The 37th AAAI Conference on Artificial**  
**Intelligence**  
 Washington, DC, USA  
 February 7-14, 2023  
<https://aaai.org/Conferences/AAAI-23/>

The purpose of the AAAI conference series is to promote research in Artificial Intelligence (AI) and foster scientific exchange between

researchers, practitioners, scientists, students, and engineers across the entirety of AI and its affiliated disciplines. AAAI-23 is the Thirty-Seventh AAAI Conference on Artificial Intelligence. The theme of this conference is to create collaborative bridges within and beyond AI. Like previous AAAI conferences, AAAI-23 will feature technical paper presentations, special tracks, invited speakers, workshops, tutorials, poster sessions, senior member presentations, competitions, and exhibit programs, and two new activities: a Bridge Program and a Lab Program. Many of these activities are tailored to the theme of bridges and all are selected according to the highest standards, with additional programs for students and young researchers.

The purpose of this year's Bridge Program is to tap into new sources of innovation by cultivating sustained collaboration between two or more communities, directed towards a common goal. AAAI-23's interpretation of bridge is broad and encompasses disciplines both within and outside of AI. Hence, the communities the Bridge Program is intended to bring together could be distinct subfields of AI, such as planning and learning, or different disciplines that contribute to and benefit from AI, such as AI and the humanities.

AAAI-23 welcomes submissions reporting research that advances artificial intelligence, broadly conceived. The conference scope includes machine learning (deep learning, statistical learning, etc), natural language processing, computer vision, data mining, multiagent systems, knowledge representation, human-in-the-loop AI, search, planning, reasoning, robotics and perception, and ethics. In addition to fundamental work focused on any one of these areas we expressly encourage work that cuts across technical areas of AI, (e.g., machine learning and computer vision; computer vision and natural language processing; or machine learning and planning), bridges between AI and a related research area (e.g., neuroscience; cognitive science) or develops AI techniques in the context of important application domains, such as healthcare, sustainability, transportation, and commerce.

Most papers in AAAI-23 will be part of the main track. This conference has two additional tracks, which focus on AI for Social Impact and Safe and Robust AI. As in past years, AAAI-23 will include a Track on AI for Social Impact (AISI). Submissions to this track will be reviewed according to a rubric that emphasizes the fit

between the techniques used and a problem of social importance, rather than simply rewarding technical novelty. In particular, reviewers will assess significance of the problem being addressed; the paper's engagement with previous literature on the application problem (whether in the AI literature or elsewhere); both novelty of and justification for the proposed AI-based approach; quality of evaluation; facilitation of follow-up work; and overall scope and promise for social impact.

This year, AAAI-23 is introducing a new special track on AI systems that are safe and robust. AI is increasingly being deployed throughout society. To ensure that this technology is trustworthy, it needs to be robust to disturbance, failure and novel circumstances. Furthermore, the technology needs to offer assurance that it will reasonably avoid unsafe, irrecoverable situations. Submissions to this track will be reviewed according to a rubric that emphasizes the fit between the driving requirements of safety and robustness for AI systems and the methods and formalisms presented.

The conference this year features diversity and inclusion activities, with example topics and activities including new open research questions that affect diversity in AI, mentoring activities for students from underrepresented groups, community-building for young researchers (graduate students and postdocs), activities to expose undergraduates to research or K-12 students to AI, and reports on successes at increasing and sustaining diversity. These activities are sponsored by the Association for the Advancement of Artificial Intelligence. AAAI-23 also features a Demonstration program, New Faculty Highlight talks, a Senior Member Presentation Track (SMPT), a student abstract and poster program, a Tutorial and Lab Forum, the 28th AAAI/SIGAI Doctoral Consortium and an Undergraduate Consortium, which will provide students who are more than one year from graduation with significant enrichment opportunities in a professional setting.

The AAAI-23 workshop program includes 32 workshops covering a wide range of topics in artificial intelligence. Workshops are one day unless otherwise noted in the individual descriptions. Registration in each workshop is required by all active participants, and is also open to all interested individuals.

AAAI-23 plans to be an in-person conference and is exploring opportunities to complement

this with remote participation. Given the volatile situation, however, the exact format of the conference can only be decided at a later stage.

### SDM23

#### The 2023 SIAM International Conference on Data Mining

Minneapolis, Minnesota, USA

April 27-29, 2023

<https://www.siam.org/conferences/cm/conference/sdm23>

Data mining is the computational process for discovering valuable knowledge from data – the core of Data Science. It has enormous application in numerous fields, including science, engineering, healthcare, business, and medicine. Typical datasets in these fields are large, complex, and often noisy. Extracting knowledge from these datasets requires the use of sophisticated, high-performance, and principled analysis techniques and algorithms, which are based on sound theoretical and statistical foundations. These techniques in turn require implementations on high performance computational infrastructure that are carefully tuned for performance. Powerful visualization technologies along with effective user interfaces are also essential to make data mining tools appealing to researchers, analysts, data scientists and application developers from different disciplines, as well as usable by stakeholders.

The SDM conference provides a venue for researchers who are addressing these problems to present their work in a peer-reviewed forum. It also provides an ideal setting for graduate students to network and get feedback for their work (as part of the doctoral forum). Everyone new to the field can also learn about cutting-edge research by hearing outstanding invited speakers and attending presentations and tutorials (included with conference registration). A set of focused workshops is also held on the last day of the conference. The proceedings of the conference are published in archival form and will also be made available online.

SDM23 has three main themes in Methods and Algorithms, Applications and Human Factors and Social Issues, with each having a broad number of relevant topics. This year's conference will have invited presentations and multiple two-hour minitutorials, as well as a half day tutorial on Data-Efficient Graph Learning. SDM23 features special events such as the IBM

Early Career Data Mining Research Award and the SDM Doctoral Forum, which provides a unique opportunity for PhD students in data science (including data mining, machine learning, databases, and pattern recognition) to present their doctoral dissertation in poster format and get feedback from SDM participants and senior leaders in the field. The conference also hosts two full day workshops: Algorithmic Fairness in Artificial intelligence, Machine learning and Decision Making, and Data Science for Smart Manufacturing and Healthcare. Please check the website for further details and updates about these events.

The pre-registration deadline for SDM23 is March 30, 2023. The Travel Fund application deadline has been extended to February 17, 2023. Refer to the website for further information.

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### **IJCAI 2023**

#### **The 32nd International Joint Conference on Artificial Intelligence**

Cape Town, South Africa

August 19-25, 2023

<http://www.ijcai-23.org/>

Starting from 1969, IJCAI has remained the premier conference bringing together the international AI community to communicate the advances and achievements of artificial intelligence research. Submissions to IJCAI-2023 will report on significant, original, and previously unpublished results on any aspect of artificial intelligence. Papers on novel AI research problems, on AI techniques for novel application domains, and papers that cross discipline boundaries within AI are especially encouraged.

In addition to the main track, authors will be able to submit papers to the two multiyear special tracks (AI for Good and AI, The Arts and Creativity), as well as the survey track; these tracks will post their own calls for papers later this year, and their deadlines, procedures and policies may differ from what is described on the IJCAI-2023 website. The special track on AI and Social Good is dedicated to research triggered by real-world key questions, is carried out in collaboration with civil society stakeholders, and uses AI to work towards the SDGs and LNOB. The track aims to encourage the application of AI to solve current global and local challenges and to strengthen the civil society-science-policy interface.

The conference is also calling for volunteers for Senior Program Committee Members and Program Committee Members, with the application forms available through the website. This year, IJCAI-2023 will feature tutorials, competition, workshop, demo and doctoral consortium programs, that will be held across the duration of the event. IJCAI-2023 also offers several attractive sponsorship packages to provide opportunities for smaller and larger companies and organizations to participate in the world's premiere AI research event, with more than 3000 expected attendees worldwide. The IJCAI-2023 Sponsorship and Exhibit Brochure is available on the website.

Registration opens on April 19, 2023. Please refer to the website for further details about the conference venue, including important local information and accommodation for specific IJCAI Conference hotels that have negotiated rates.