EVENTS/CONFERENCES SPONSORED BY TCII

Past Events/Conferences

IEEE ICKG 2020
The 11th IEEE International Conference on Knowledge Graph (ICKG-2020)
Nanjing, China (Virtual Conference)
August 9-11, 2020
http://ickg2020.bigke.org

Knowledge Graph deals with fragmented knowledge from heterogeneous, autonomous information sources for complex and evolving relationships, in addition to domain expertise. The IEEE International Conference on Knowledge Graph (ICKG), previously entitled ICBK until 2019, provides a premier international forum for presentation of original research results in Knowledge Graph opportunities and challenges, as well as exchange and dissemination of innovative, practical development experiences. The conference covers all aspects of Knowledge Graph, including algorithms, software, platforms, and applications for knowledge graph construction, maintenance, inference and applications.

ICKG 2020 drew researchers and application developers from a wide range of Knowledge Graph related areas such as knowledge engineering, big data analytics, statistics, machine learning, pattern recognition, data mining, knowledge visualization, high performance computing, and World Wide Web. By promoting novel, high quality research findings, and innovative solutions to challenging Knowledge Graph problems, the conference continuously advanced the state-of-the-art in Knowledge Graph techniques.

ICKG-2020 hosted 84 papers. Themes and topics included: Foundations, algorithms, models, and theory of Knowledge Graph processing; Knowledge engineering with big data; Machine learning, data mining, and statistical methods for Knowledge Graph science and engineering; Acquisition, representation and evolution of fragmented knowledge; Fragmented knowledge modeling and online learning; Knowledge graphs and knowledge maps; Knowledge graph

security, privacy and trust; Knowledge graphs and IoT data streams; Geospatial knowledge graphs; Ontologies and reasoning; Topology and fusion on fragmented knowledge; Visualization, personalization, and recommendation of Knowledge Graph navigation and interaction; Knowledge Graph systems and platforms, and their efficiency, scalability, and privacy; Applications and services of Knowledge Graph in all domains including web, medicine, education, healthcare, and business; Crowdsourcing, deep learning and edge computing for graph mining; and Rule and relationship discovery in knowledge graph computing.

Upcoming Events/Conferences

WI-IAT 2020
The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology
Melbourne, Australia (Virtual Conference)
December 14-17, 2020

Web Intelligence and Intelligent Agent Technology (WI-IAT) 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 '20 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.

The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT '20) 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. The theme for the WI-IAT 20 is "Web Intelligence = AI in the Connected World". The main topics and themes of this year's conference are Web of People, Web of Trust, Web of Things, Web of Data and Web of Agents, with a special track dedicated to Emerging Web in Health and Smart Living in the 5G era. There are approximately 79 topics spread across these 6 tracks.

WI-IAT '20 is a forum for research, application as well as Industry/Demo-Track paper submissions. Tutorial, Workshop and Special-Session proposals and papers are also welcome.

ICDM 2020
IEEE International Conference on Data Mining
Sorrento, Italy (Virtual Conference)
November 17-20, 2020
http://www.icdm2020.bigke.de

The IEEE International Conference on Data Mining series (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, practical development experiences. The conference covers all aspects of data mining, including algorithms, software and systems, and applications. ICDM draws researchers and application developers from a wide range of data mining related areas such as statistics, machine learning, pattern recognition, databases and 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 continuously advance the state-of-the-art in data mining. Besides the technical program, the conference features workshops, tutorials, panels.

The 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.

Accepted papers will be published in the conference proceedings by the IEEE Computer Society Press. Awards will be conferred at the conference to the authors of the best paper and the best student paper. A selected number of best papers will be invited for possible inclusion, in an expanded and revised form, in the Knowledge and Information Systems journal (http://kais.bigke.org/) published by Springer.

ICHI 2020
The Eighth IEEE International Conference on Healthcare Informatics
Virtual Conference
Nov. 30-Dec. 3, 2020
https://ichi2020.de

The Eighth IEEE International Conference (ICHI 2020) will take place online in 2020. ICHI 2020 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.

ICHI 2020 serves as a venue for the discussion of innovative technologies and implementation science, highlighting end-to-end applications, systems, and technologies, even if available only in prototype form. 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 2020 will feature keynotes, a multi-track technical program including papers, posters, panels, workshops, tutorials, an industrial track, and a doctoral consortium.

The tracks in this year's conference include Analytics, Human Factors and Systems. All accepted submissions will be published in IEEE Xplore and are indexed in other Abstracting and Indexing (A&I) databases. Selected papers will be invited to submit the extended version to the Journal of Healthcare Informatics Research and a fast track review will be conducted for the extended papers.

IEEE BigData 2020
The 2020 IEEE International Conference on Big Data (IEEE BigData 2020)
Atlanta, USA (Virtual Conference)
December 10-13, 2020
http://bigdataieee.org/BigData2020/

The IEEE International Conference on Big Data 2020 (IEEE BigData 2020) provides a leading forum for disseminating the latest research in Big Data. IEEE Big Data brings together leading researchers and developers from academia, research and the industry from all over the world to facilitate innovation, knowledge transfer and technical progress in addressing the 5 V's (Velocity, Volume, Variety, Value and Veracity) of Big Data. The purpose of the conference is to identify deep technical and scientific nature of big data problems, and share the future direction on the development of next-generation solutions for data-driven decision making. The conference will attract high-quality theory and applied research findings in big data science and foundations, big data infrastructure, big data management, big data search & mining, privacy/security, and big data applications.

The IEEE BigData 2020 received more than 610 full papers in the main conference and industry and government program. The conference hosts a number of workshops and poster presentations that are published along with accepted papers in the conference proceedings. The special sessions and tracks include themes such as Data Marketing, Intelligent Data Mining, HealthCare Data, Machine Learning on Big Data, Information Granulation and Explainable Artificial Intelligence in Safety Critical Issues. With a focus on Big Data, the conference also runs a number of sponsored tutorials run by experts in the fields of computing, computer science and data science.

AAMAS 2021
The 20th International Conference on Autonomous Agents and Multi-Agent Systems
London, UK
May 3-7, 2021
http://aamas2021.soton.ac.uk

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 and 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).

AAMAS'21 is inviting submissions of technical papers describing significant and original research on all aspects of the theory and practice of autonomous agents and multiagent systems. Papers are associated with area of interest, which include: 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.

AAMAS-2021 will feature three special tracks, the Blue Sky Ideas Track, the JAAMAS Track, and the Demo Track, each with a separate Call for Papers. The focus of the Blue Sky Ideas Track is on visionary ideas, long-term challenges, new research opportunities, and controversial debate. The JAAMAS Track offers authors of papers recently published in the Journal of Autonomous Agents and Multiagent Systems (JAAMAS) that have not previously appeared as full papers in an archival conference the opportunity to present their work at AAMAS-2021. The Demo Track, finally, allows participants from both academia and industry to showcase their latest developments in agent-based and robotic systems.

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AAAI 2021
The 35th AAAI Conference on Artificial Intelligence
Virtual Conference
February 2-9, 2021
https://aaai.org/Conferences/AAAI-21/

The Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI-21) will be held virtually February 2-9, 2021. The general chair will be Qiang Yang (Hong Kong University of Science and Technology, Hong Kong) and the program chairs will be Kevin Leyton-Brown (University of British Columbia, Canada) and Mausam (Indian Institute of Technology Delhi, India).

The purpose of the AAAI conference is to promote research in artificial intelligence (AI) and scientific exchange among AI researchers, practitioners, scientists, and engineers in affiliated disciplines. AAAI-21 will have a diverse technical track, student abstracts, poster sessions, invited speakers, tutorials, workshops, and exhibit and competition programs, all selected according to the highest reviewing standards. AAAI-21 welcomes submissions on mainstream AI topics as well as novel crosscutting work in related areas.

AAAI-21 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, work is encouraged that cuts across technical areas of AI, 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-21 will be part of the "main track". In addition to typical AI areas, there will be three focus areas within the main track that highlight timely topics. All main track papers will be reviewed according to the same criteria and via the same process. A second track of the conference will focus on AI for Social Impact. Papers in this track will be reviewed according to a different evaluation rubric than the main track. The same reviewing schedule will be followed for all papers.

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SDM21
The 2021 SIAM International Conference on Data Mining
Virtual Conference
April 29 – May 1, 2021
https://www.siam.org/conferences/cm/conference/sdm21

Data mining is the computational process for discovering valuable knowledge from data – the core of modern Data Science. It has enormous applications 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. 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.

SDM has established itself as a leading conference in the field of data mining and provides a venue for researchers who are addressing these problems to present their work in a peer-reviewed forum. SDM emphasizes principled methods with solid mathematical foundation, is known for its high-quality and high-impact technical papers, and offers a strong workshop and tutorial program (which are included in the conference registration). The proceedings of the conference are published in archival form, and are also made available on the SIAM website.

SDM21 has three main categories in Methods and Algorithms, Applications and Human Factors and Social Issues. Each category contains a multitude of related themes as topics for papers. Please visit the website for more information.

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IJCAI 2021
The 30th International Joint Conference on Artificial Intelligence
Montreal, Canada
August 21-26, 2021
http://www.ijcai-21.org/

Submissions are invited for the 30th International Joint Conference on Artificial Intelligence (IJCAI-21), which is planned to be held in Montreal, Canada, from August 21st to August 26th, 2021. 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-21 should be significant, original, and previously unpublished results on all aspects of artificial intelligence. Papers on novel AI research problems and novel application domains are especially encouraged. The submission site for IJCAI-21 opens December 30, 2020.