The 10th IEEE/ACM International Conference on Big Data Computing, Applications and Technologies (BDCAT2023)

Call for Papers

The IEEE/ACM International Conference on Big Data Computing, Applications, and Technologies (BDCAT) is a premier annual conference series aiming to provide a platform for researchers from both academia and industry to present new discoveries in the broad area of big data computing and applications. The conference features keynotes, posters, workshops and a student symposium. BDCAT 2023 will be held in conjunction with the 16th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2023) in Taormina, Messina, Italy.

Authors are invited to submit original, unpublished research manuscripts in all areas of Big Data computing, applications and technologies, as well as on related scaling data analysis. Topics of interest include (but not limited to):

Scaling Machine Learning and Data Mining: Data Science Models and Approaches; Data Acquisition, Integration, Cleaning and Best Practices; Supervised, Unsupervised and Reinforcement Learning; Neural Networks, Convolution Neural Networks and Recurrent Neural Networks; Transformer and Natural Language Processing; Swarm Intelligence and Evolutionary Strategy; Efficient Model Training, Inference and Serving; Distributed, Federated and Parallel Learning Algorithms; Testing, Debugging and Monitoring; Fairness, Interpretability and Explainability Specialized Hardware for Scaling.

Scaling Data Infrastructures and Platforms: Scalable Computing Models, Theories and Algorithms; Mapreduce: Hadoop and Spark; Privacy and Security over the Data Life Cycle; Data Search and Information Retrieval Techniques; Extract/Transform/Load (ETL) or ETL Pipelines; In-Memory Systems and Platforms; Performance Evaluation Reports; Storage Systems (including file systems, NoSQL, and RDBMS); Resource Management Approaches; Data Analytics on Edge Devices; Fault Tolerance and Reliability; Energy-Efficiency and Sustainability; Data Archival and Preservation.

Scaling Data Applications Data Applications for Internet of Things, Mobile Applications and Cyber-Physical Systems; Data Applications for Healthcare and Life Science (e.g., Genome Processing); Data Applications for Physical Science and Engineering; Data Applications for Business and Enterprise Applications; Data Applications for Social Networks; Data Applications for Scientific Case Studies; Data Applications over the Cloud-Edge Continuum; Data Streaming and Batch Applications; Data Trends and Challenges.

Scaling Data Visualization Visual Analytics Algorithms and Foundations; Graph and Context Models for Visualization; Analytics Reasoning and Sensemaking; Visual Representation and Interaction; Data Transformation and Presentation.

Paper Submission

Authors are invited to submit papers electronically through the following link: `https://cmt3.research.microsoft.com/UCCBDCAT2023`.

Submitted manuscripts must represent original unpublished research that is not currently under review for any other conference or journal. Manuscripts are submitted in PDF format and may not exceed ten (10) ACM-formatted *double-column* pages, including figures, tables, and references. All manuscripts undergo a double-blind peer-review process and will be reviewed and judged on correctness, originality, technical strength, rigor in analysis, quality of results, quality of presentation, and interest and relevance to the conference attendees. Your submission is subject to a determination that you are not under any sanctions by ACM.

At least one author of each paper must be registered for the conference in order for the paper to be published in the proceedings. The conference proceedings will be published by the ACM and made available online via the IEEE Xplore Digital Library and ACM Digital Library.

Important Dates

Timezone: Anywhere in the world!
Paper Submissions Due: August 17, 2023
Acceptance Notification: September 30, 2023
Camera Ready Papers Due: October 21, 2023

Organizing Committee

General Co-Chair(s)
Massimo Villari, University of Messina, Italy
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