

Call for Papers

The 11th IEEE International Conference
on Big Data Computing Service and Machine Learning Applications
(IEEE BigDataService 2025)

21-24 July 2025 Tucson, Arizona, United States

<https://conf.researchr.org/track/cisose-2025/bigdataservice-2025>

As computing systems grow in scale, complexity, and integration, Big Data technologies and services have become more critical than ever. **IEEE BigDataService 2025** serves as a premier international forum for researchers and practitioners from academia and industry to exchange cutting-edge ideas, share innovative research, and discuss real-world applications and challenges in the field.

The conference will be held **in person** in Tucson, **Arizona, United States from July 21-24, 2025**.

It will consist of a main track with several topics of interest, welcoming high-quality papers in the IEEE format. The conference also welcomes **workshop proposals**. All accepted papers will be included in the IEEE Press proceedings. Selected papers will be invited to submit extended versions in special issues of a peer-reviewed (SCI-Indexed) journal.

IEEE BigDataService 2025 is part of the **CISOSE 2025 congress**, and it will be co-located with

- **IEEE AITest 2025 (AI Testing)**
- **IEEE DAPPS 2025 (Decentralized Applications)**
- **IEEE IMC 2025 (Intelligent Mobile Computing former MobileCloud)**
- **IEEE ISADS 2025 (Symposium on Autonomous Decentralized System)**
- **IEEE JCC 2025 (Joint Cloud Computing)**
- **IEEE SOSE 2025 (Service-Oriented System Engineering)**
- **IEEE FITYR 2025 (Future Intelligent Technologies for Young Researchers)**

Join us in Tucson for insightful discussions, networking opportunities, and groundbreaking research in Big Data services and machine learning applications!

TOPICS OF INTEREST of IEEE BigDataService 2025 (INCLUDING BUT NOT LIMITED TO):

Big Data Analytics and Machine Learning

- Algorithms and systems for big data analytics
- Big data Machine learning, predictive and causal analytics
- Visualization and visual analytics systems for big data
- Knowledge modeling, extraction, discovery, analysis, and presentation
- Big data Business intelligence
- Optimization and agentic models for big data
- Artificial intelligence models at scale
- Large language models
- Neuro-symbolic approaches at large scale

Integrated and Distributed Systems

- Sensor networks
- Internet of Things, web of things
- Networking and protocols
- Smart Systems (such as energy efficiency systems, smart homes, smart farms, etc.)

Big Data Platforms and Technologies

- Innovative, concurrent, and scalable big data platforms

- Data indexing, cleaning, transformation, and curation technologies
- Big data processing frameworks and technologies
- Big data services and application development methods and tools
- Big data quality evaluation and assurance technologies
- Big data system reliability, dependability, and availability
- Open-source development and technology for big data
- Big Data as a Service (BDaaS) platform and technologies

Big Data Foundations

- Foundational theoretical or computational models for big data
- Programming models, theories, and algorithms for big data
- Standards, protocols, and quality assurance for big data

Big Data Applications and Experiences

- Innovative big data applications and services in industries and domains e.g. healthcare, finance, insurance, transportation, agriculture, education, environment, multimedia, social networks, urban planning, disaster management, security
- Experiences and case studies of big data applications and services
- Real-world and large-scale practices of big data

SUBMISSIONS:

Three different types of contributions can be submitted:

- Regular/Full papers (up to 8 pages, IEEE double-column format)
- Short papers (up to 5 pages, IEEE double-column format)
- Posters (2 pages, IEEE double-column format)

All papers must be submitted to EasyChair <https://easychair.org/my/conference?conf=bigdataservice2025>

Workshop proposals can be sent directly by email to the PC Chairs or General Chairs

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IMPORTANT DATES:

- Workshop proposals: April 11, 2025
- Abstract submission: April 15, 2025
- Full, short, demo, and poster papers submission: **April 25, 2025**
- Notification of acceptance: May 26, 2025
- Final Paper and Registration: June 15th, 2025
- Conference: July 21-24, 2025