

USDAI 2022 - Call for papers

3rd International Workshop on Underpinnings for Safe Distributed AI
6th September 2022, Online, in conjunction with SAFECOMP 2022

Workshop theme:

Enabling technologies and regulatory frameworks for safe distributed AI

Safe distributed Artificial Intelligence (AI) requires reliable and secure underpinnings, i.e. enabling technologies as well as legal and regulatory frameworks. These will be horizontal efforts, to be deployed in many and different application areas.

This workshop will address a wide range of enabling methods and technologies to ensure trustworthiness of the data as well as soundness of the processing and use of these data. The topics covered will range from advanced computational methods to the legal and regulatory framework in which they must function. Cloud computing, edge devices and the Internet of Things (IoT) pose novel challenges to the application of AI.

The aim is to unite academic research, oriented towards applications in real-world settings, with industrial research and development to explore options for application-oriented uptake of new technologies in the field of safe distributed AI. The workshop will combine presentations of papers with panel discussions to explore the ideas presented and possible synergies that can lead to safer distributed systems.

Article submissions are welcome that relate to:

- *Data collection, transport and storage for safe distributed AI*
- *Data processing and analytics for safe distributed AI*
 - *Trustworthy data, sharing & analytics*
 - *Safe and reliable data processing and machine learning in hardware and software*
 - *Methods for traceability, accountability and explainability in AI*
- *Safe and reliable actuation based on AI control systems*
- *Secure DevOps for safe distributed AI*
- *Edge processing to support AI and AI to support edge computing applications*
- *Methods for distributed and federated application of AI, such as federated learning*
- *Application-level considerations of distributed AI in relevant fields such as healthcare, mobility, manufacturing, aerospace, etc.*
- *Considerations related to schemes for approval, qualification and certification of distributed AI*
- *Legal and regulatory issues regarding distributed AI, including but not limited to issues concerning privacy and data protection, intellectual property, freedom of expression, cybersecurity, liability (e.g. in relation to autonomous cars, drones, and robots), competition, consumer protection, equality and discrimination, healthcare, internet of things, smart offices and cities, energy, and the environment.*
- *Safe, secure and reliable alternatives to the established technology stacks in the area distributed data systems.*
- *Initiatives to implement base technologies from scratch*
- *Well-founded methods for higher degrees of coherency in multi-dimensional data analytics, including algebras for data series or for coherent treatment of space and time*

Format and submission

All papers will be reviewed by at least three reviewers. Workshop proceedings will be provided as a complementary book to the SAFECOMP Proceedings in Springer LNCS. Please keep your paper format according to SPRINGER LNCS style guidelines

(<http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>). Papers (6-12 pages) will be reviewed by at least three reviewers.

Submission is via EasyChair: <https://easychair.org/conferences/?conf=usdai2022>

Tentative Deadlines

Full paper submission:	06 May 2022
Notification of acceptance:	25 May 2022
Camera-ready submission:	10 June 2022
Workshop	06 September 2022

Programme committee

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