Call for Contributions

1. Inform the Chair: with the title of your contribution
2. Submission URL:
https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=DBKDA+2025+Special
Please select Track Preference as **IFSEAI**
3. Note: *For 2025, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on-site scientific events. However, we are ready to adapt any which way the conditions dictate.*

Special track
IFSEAI: Interpretable Feature Selection for Explainable Artificial Intelligence

Chair
Prof. Basabi Chakraborty, Ph.D.
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along with

DBKDA 2025: The Seventeenth International Conference on Advances in Databases, Knowledge, and Data Applications
March 09 - 13, 2025 - Lisbon, Portugal
https://www.iaria.org/conferences2025/DBKDA25.html

In recent years, eXplainable Artificial Intelligence (XAI) has gained significant attention in the development of trustworthy AI systems for recommendation and decision-making, particularly in high-risk application areas such as healthcare, finance, and control. In this context, the interpretability of Machine Learning (ML) algorithms is central to the process. Feature selection is the essential preprocessing step of any ML algorithm, as it directly impacts the ML model's performance and clarity. Interpretable feature selection brings transparency to the black box process, providing scope of designing ML models, which in turn leads to the development of explainable and trustworthy AI system.

IFSEAI provides a platform to explore theoretical advancements and present new, efficient algorithms for interpretable feature selection. These approaches incorporate ideas from various fields, including game theory, optimization, and quantum computing. The track also aims to bridge the gap between research and real-world applications by encouraging discussions on the role of interpretable feature selection in developing explainable and trustworthy AI systems, from both theoretical and practical perspectives. We cordially invite you to contribute and participate in this special track, whether through theoretical exploration, algorithm development, or practical applications

Prospective authors are invited to submit original papers on topics including, but not limited to

- Theoretical foundation of interpretability in feature selection
- Interpretable feature selection algorithm for explainable AI
- Evolutionary search-based techniques for feature selection
- Clustering and graph-based techniques for feature selection
- Interpretable feature selection for high dimensional data
- Interpretable feature selection for time series data
- Interpretable feature selection for textual data
- Interpretable feature selection using deep neural network models
- Ensemble methods for feature selection
- Shapley value-based tools for feature selection
- Quantum inspired tools for feature selection
- Quantum computing for feature selection

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Important Deadlines

Inform the Chair or Coordinator: As soon as you decide to contribute
       Submission: Jan 18, 2025
       Notification: Feb 7, 2025
       Registration: Feb 20, 2025
       Camera-ready: Feb 20, 2025
Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chairs.

Paper Format

- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules: http://www.iaria.org/editorialrules.html

Publications

- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the Open Access ThinkMind Digital Library: http://www.thinkmind.org

Paper Submission

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=DBKDA+2025+Special
Please select Track Preference as **IFSEAI**

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

Contact

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