

INFUS 2024

International Conference on Intelligent and Fuzzy Systems

July 16th-18th, 2024 - Çanakkale, Türkiye

Theme

Intelligent Industrial Informatics and Efficient Networks

Intelligent industrial informatics and efficient networks are at the forefront of modern industrial systems. This cutting-edge field integrates advanced technologies, such as artificial intelligence, machine learning, and data analytics, into industrial processes, revolutionizing the way industries operate. By harnessing the power of intelligent informatics, businesses can optimize their operations, enhance productivity, and improve decision-making processes.

One key aspect of this paradigm shift is the implementation of smart sensors and IoT devices, which facilitate real-time data collection and communication. These sensors continuously monitor various parameters, providing a wealth of information on factors like temperature, humidity, pressure, and machine performance. This data is then processed by intelligent algorithms, enabling predictive maintenance strategies, and reducing downtime. Moreover, through the application of machine learning, these systems can adapt and learn from historical data, allowing for more accurate and efficient operations over time.

Efficient networks play a pivotal role in this ecosystem, providing the infrastructure for seamless communication and data exchange. High-speed, low-latency networks ensure that information flows effortlessly between devices, enabling timely responses and enabling the coordination of complex manufacturing processes. This network architecture supports the integration of edge computing, where data processing occurs closer to the source, reducing latency and enabling faster decision-making.

Furthermore, the concept of digital twins, which involves creating virtual replicas of physical systems, is a cornerstone of intelligent industrial informatics. These digital counterparts allow for simulation, testing, and optimization of processes in a virtual environment before implementation in the real world. This not only minimizes the risk of errors but also enables continuous improvement and innovation

Keynote Speakers

Prof. Janusz Kacprzyk Prof. Ajith Abraham Prof. Vicenç Torra

Prof. Irina Perfilieva Prof. Krassimir Atanassov Prof. Ahmet Fahri Özk

Important Dates



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INFUS Conferences

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INFUS is an acronym for Intelligent and Fuzzy Systems. It is an international research forum to advance the foundations and applications of intelligent and fuzzy systems, computational intelligence, and soft computing for applied research in general and for complex engineering and decision support systems. The principal mission of INFUS is bridging the gap between fuzzy & intelligence systems and real complex systems via joint research between universities and international research institutions, encouraging interdisciplinary research and bringing multidisciplinary researchers together.

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Proceedings

All accepted papers will be Double Peer Blind Reviewed and the accepted papers will be published as a book by Springer under “Lecture Notes in Networks and Systems” and will be indexed in Scopus, and submitted for consideration in Web of Science.

Publication Opportunity in Conference Associated Journals

Journal of Multiple-Valued Logic and Soft Computing (SCI-E)

Journal of Risk Analysis and Crisis Response (DOAJ)

Journal of Fuzzy Logic and Modeling in Engineering

Symmetry (SCI-E)

International Journal of Analytic Hierarchy Process (Scopus)

Sustainability (SCI-E)

Transactions on Fuzzy Sets and Systems

Artificial Intelligence Theory and Applications

Special Sessions

Researchers are invited to submit a one-page proposal for a special session to the conference address [infus@itu.edu.tr]. A special discount in registration fee will also be applied to special session organizers.

Program and Social Events

A social program will be organized to Assos, the Museum of Troy, the Ancient City of Troy, and the Trojan Horse.

