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## Artificial Intelligence Explainability (XAI) and Interpretability: Exploring the Potential of XAI in Fault Diagnosis and Cyber-Physical Systems

Guest Editors:

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**Dr. Christopher Turner**

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Deadline for manuscript  
submissions:

**closed (30 September 2022)**

### Message from the Guest Editors

This Special Issue invites papers on the rapidly growing field of explainable AI (XAI) theories and methods, as applied to fault diagnosis of systems such as traditional manufacturing systems, smart cyber-physical systems, and remote condition monitoring of equipment to mention a few. We invite you to contribute to this issue by submitting both case studies and research articles, we are open to papers that address (but are not limited to) the following keywords:

- Application of fuzzy logic theory to aid understanding of AI decisions
- New explainable AI (XAI) concepts
- Novel cognitive architectures
- Natural language processing
- Equipment condition monitoring and maintenance
- Human in the loop systems
- XAI and Industry 4.0 / IoT
- Theories, analysis, and visualization of interpretable machine learning/deep learning method
- Industrial applications of interpretable machine learning/deep learning method
- Bayesian networks and probabilistic graphical models
- Knowledge representation and reasoning
- Reasoning under uncertainty



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## Message from the Editor-in-Chief

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