

Call for Papers

Special Issue of the *Int. Journal of AI and Knowledge Engineering (IJAIKE)* on “Explainability in AI”



Website: IJAIKE.org

The International Journal of AI and Knowledge Engineering (IJAIKE) is seeking high-quality research contributions for a Special Issue on *Explainability in AI*. As AI continues to drive innovation in healthcare, finance, and other domains, ensuring transparency and interpretability in AI models remains a critical challenge. This special issue will explore frameworks, methodologies, and applications that improve explainability in AI systems, fostering trust, accountability, and ethical AI practices.

Topics of Interest:

This call for papers is seeking contributions on a range of topics, including but not limited to:

- **Foundational Topics in Explainable AI:**
 - Metrics and Evaluation Frameworks for Explainability in AI
 - Transparency and Interpretability in Deep Learning Models
 - Post-Hoc vs. Intrinsic Explainability: Comparative Approaches
 - Human-AI Collaboration: Understanding Explainability from a User Perspective
 - XAI for Multi-Agent Systems: Transparency in Collaborative AI Decision-Making
- **Explainability in Specific Domains:**
 - Explainable AI in Healthcare: Enhancing Trust in Medical Diagnoses
 - Explainability in Biomedical AI: Transparency in AI-Driven Drug Discovery and Genomics
 - AI in Mental Health: Ethical and Interpretability Concerns in AI-Assisted Diagnosis
 - Financial AI Explainability: Transparent Credit Scoring and Risk Assessment
 - XAI for Algorithmic Trading: AI-Driven Financial Predictions and Risk Assessment
 - Legal and Compliance: AI Accountability in Judicial and Regulatory Frameworks
 - XAI for Security: Understanding AI-driven Cyber Threat Detection
 - XAI for Autonomous Systems: Interpretability in Self-Driving Cars and Robotics
 - AI Explainability for Climate Modeling and Environmental Predictions
 - AI in Precision Agriculture: Explainability for Smart Farming Decisions
 - XAI in Oil & Gas sector: Interpretable AI for Seismic Data Processing
 - XAI in Oil & Gas sector: Explainability in AI for Supply Chain Optimization

- **Advances in Explainability Techniques:**
 - Knowledge Graph-Based Explainability in AI Models
 - Federated Learning and Privacy-Preserving XAI
 - Visualization Techniques for Enhancing AI Explainability
 - Explainability in Reinforcement Learning: Interpretability of Decision Paths
 - Counterfactual Explainability: Generating Alternative Scenarios for Model Interpretation
 - Causal Inference in XAI: Understanding the Cause-and-Effect Relationships in AI Decisions
 - Explainability in Generative AI: Interpreting Large Language Models and Diffusion Systems
 - Explainable Multi-Objective Optimization: Balancing Competing AI Goals Transparently
 - Feature Attribution vs. Concept-Based Explanations: A Comparative Analysis
- **Ethical and Policy Considerations in Explainable AI:**
 - Regulatory Compliance: Explainability Under GDPR and AI Act
 - Fairness and Bias Mitigation Through Explainable AI
 - Trustworthiness and User Adoption of AI Recommendations
 - Measuring the Social Impact of Explainability in AI
 - Auditable AI: Methods for Ensuring Explainability in Regulatory Compliance
 - Explainability in AI for National Security and Cyber Defense
 - Ethical Dilemmas in Explainability: When Transparency Conflicts with Performance
 - User Perceptions of Explainability: Psychological and Behavioral Insights
 - Explainability in Federated Learning and Decentralized AI Systems
- **Emerging Trends in Explainable AI:**
 - Explainability in Human-AI Collaboration: Enhancing Shared Decision-Making
 - Interpretable AI for Scientific Discovery: Bridging AI Insights with Human Intuition
 - Explainability in Large-Scale AI Deployments: Challenges in Enterprise and Public Sector Adoption
 - Generalizability of Explainability Methods Across Different AI Architectures
 - Hybrid XAI: Combining Symbolic Reasoning with Deep Learning for Improved Transparency
 - Multimodal Explainability: Interpreting AI Models Using Text, Images, and Audio Together
 - Zero-Shot and Few-Shot Learning Explainability: Transparency in Models with Limited Training Data
 - AI Explainability for Quantum Computing: Understanding AI Decisions in Quantum Algorithms
 - Fairness-Aware Explainability: Mitigating Bias While Enhancing AI Interpretability

An example of explainability in an AI algorithm might be a machine learning model used in credit scoring, where the AI evaluates an individual's creditworthiness based on various factors like income, credit history, employment status, and debt levels. The ability to interpret and justify these decisions is crucial for ensuring fairness and transparency in financial services.

The IJAIKE journal is an open-access publication managed by the [Association for the Advancement of Knowledge Solutions \(AAKS\)](#) in cooperation with the [EurAsia Academic Publishing Group \(EAPG\)](#).

We invite researchers, practitioners, and industry experts to submit original research articles, review papers, and case studies that advance explainability in AI-driven systems.

Submission Guidelines:

- Manuscripts should be submitted via the **Clarivate ScholarOne Manuscript Central Submission** portal at <https://mc04.manuscriptcentral.com/jaike>
- All submissions will be peer-reviewed to ensure high-quality contributions.
- Manuscripts must adhere to the journal's formatting guidelines

Important Dates:

Submission Deadline:	December 15, 2025
Final Acceptance:	April 15, 2026
Publication Date:	December 2026

Guest Editors:

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We look forward to receiving your contributions, advancing, and shaping the future of education with AI!