



## Presentations on 20-21 March 2025, UK

### Research Topic Titles

1. Challenges and Improvements of Large Language Models on Mathematical Computing, Reasoning and Specialization
2. Leveraging Artificial Intelligence Across the Software Development Life Cycle A Comprehensive Systematic Review of Tools and Techniques
3. A Hybrid Time-Frequency and Lightweight Deep Learning Model for Intelligent Fault Diagnosis of Rolling Bearings
4. MACHINE LEARNING FOR RECRUITMENT: ANALYZING JOB-MATCHING ALGORITHMS
5. Multilingual fusion phoneme recognition via iterative restructuring of phoneme pairs
6. Advancing Offline Handwritten Text Recognition: A Systematic Review of Data Augmentation and Generation Techniques
7. Research On Fault Diagnosis Method Of Rolling Bearing Based On Vibration Signal And Deep Learning
8. Multimodal Aspect-based Sentiment Classification on Structural Enhancement and Text-Image Alignment Fusion
9. Multilingual fusion phoneme recognition via iterative restructuring of phoneme pairs
10. Automatic Infection Detection Based on Electronic Medical Record
11. Beyond Acoustic Perturbations: Detecting Emotion Fakes Through Reversal-Invariant Feature Disentanglement
12. Fine-Grained Semantic Segmentation via Contextual Refinement and Adaptive Rescaling Loss
13. MSMIFuse: An Unsupervised Multi-Stage Deep Learning Framework for CT-MRI Image Fusion
14. GCRNet: Global Category-Graph Reasoning Network for Few-Shot Ultrasound Object Detection
15. Enhancing Recruitment with Machine Learning: Analysing Job-Matching Algorithms
16. Multilingual Text Classification with Language-Specific Roberta for Similar Alphabet Languages
17. MSMIFuse: An Unsupervised Multi-Stage Deep Learning Framework for CT-MRI Image Fusion
18. Fine-Grained Semantic Segmentation via Contextual Refinement and Adaptive Rescaling Loss
19. GCRNet: Global Category-Graph Reasoning Network for Few-Shot Ultrasound Object Detection
20. Improved YOLOv8 for German Traffic Sign Detection with Attention Mechanism and Transfer Learning
21. A Novel Knowledge Enhanced Pre-trained Language Models for Log Understanding
22. Taming Generative Diffusion Prior for Universal Blind Image Restoration
23. A Comprehensive Survey on Offline Handwritten Data Augmentation and Generation Techniques
24. AI for the 15-Minute City: Optimizing Urban Accessibility
25. Diabetic Retinopathy Detection Using AI
26. Advancing Semantic E-Government through Ontology: Methodologies for Designing a Smart Educational System Framework
27. Smart Software Development Practices: An AI-integrated Platform for Software Project Management