

Artificial Intelligence XLII

45th SGA International Conference on Artificial Intelligence, AI 2025, Cambridge, UK, December 16-18, 2025, Proceedings, Part I

This two-volume set, LNAI 16301 and LNAI 16302, constitutes the refereed proceedings of the 45th SGA International Conference on Artificial Intelligence, AI 2025, held in Cambridge, UK, during December 16-18, 2025.

The 47 full papers and 20 short papers presented in these two volumes were carefully reviewed and selected from 93 submissions. The papers are grouped into these topical sections:

Part I: Technical Papers; Deep Learning; Large Language Models; Machine Learning; Neural Networks;
Techniques of AI and Short Technical Papers.

Part II: Application Papers; Evolutionary Algorithms; Machine Learning; Neural Networks; Medical Computing and Health Informatics; Large Language Models; Natural Language Processing and Machine Vision; Applications of Artificial Intelligence and Short Application Papers.

.- Technical Papers.- DESS: Dimensional-PDFs for Embedding Space Sampling (Best Technical Paper).- Deep Learning.- A Hybrid Reasoning System for Visual Arithmetic Learning.- NERULA: A Dual-Pathway Self-Supervised Learning Framework for Electrocardiogram Signal Analysis.- This Looks Like That and That and That: Multi-objective Optimization for Diverse Prototype Learning.- Large Language Models.- Mass-Scale Analysis of In-the-Wild Conversations Reveals Complexity Bounds on LLM Jailbreaking.- Data and Knowledge-Driven Approach for Energy Profiling in Smart Context-Aware Buildings.- Retry and Refine: A Multi-Agent Framework for LLM Based Reliable Unit Test Generation.- English K_Quantization of LLMs Does Not Disproportionately Diminish Multilingual Performance.- Rethinking the Illusion of Thinking.- TravQuery: A Customer Support Chatbot based on Retrieval Augmented Generation (RAG).- Machine Learning.- 6D Grasp Pose Estimation using Machine Learning with Synthetic Data: Explainable Grasping with Point Cloud Networks.- A New Longitudinal Classification Method Based on Stacking Predictions for Separate Time Points.- Measuring and Comparison of the Energy Consumption of different Machine Learning Methods.- Machine Learning-Enhanced Production Frontier Estimation: An EATBoosting Variant.- A Comparative Study of Feature Selection in Tsetlin Machines.- MTL-LungNet: A Unified Model for Nodule Segmentation and Malignancy Classification.- Neural Networks.- Two-Stage Graph Convolutional Framework for Pipeline Leak Detection and Size Identification.- TamilSandhi: A Neuro-Symbolic AI toolkit for correcting Sandhi errors in Tamil.- Techniques of AI.- Navigating the N-Person Prisoners' Dilemma: From the Tragic Valley to the Collaborative Hill.- Evolutionary Harnessing of Sneak Currents of 1R Memristive Crossbar.- Short Technical Papers.- Bias Detection in Online Higher Education Texts: Comparing Fine-Tuned and Zero-Shot LLM Approaches.- Enhancing Deepfake Detection with Audio Spectrograms and Siamese Networks.- Learning to Navigate and Track: A Decentralized RL Framework for UAV Operations in GNSS-Denied Terrain.- Dynamic Fusion of Structured Covariates into Deep Signal Backbones.- Global Explanations for Imitation Learning.- Attention or Convolution? Comparing Modern Architectures for Stress Detection on BVP Image Encodings.- High-Confidence Clustering and Lightweight U-Net for SAR Change Detection.- Towards a Technical Definition of Artificial Intelligence and Machine Learning Software Systems.



70,61 €
65,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783032114013
Medium: Buch
ISBN: 978-3-032-11401-3
Verlag: Birkhäuser
Erscheinungstermin: 24.11.2025
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2025
Serie: Lecture Notes in Artificial Intelligence
Produktform: Kartoniert
Gewicht: 557 g
Seiten: 343
Format (B x H): 155 x 235 mm

