International Conference on

Robotics & Automation

May 19-21, 2025 | Osaka, Japan

Scientific Program

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International Conference on Robotics & Automation
Program Details
Registration and Opening Ceremony
Day 1 May 19th, 2025
Oral Presentations

Using machine learning to predict investors' switching behaviour

Evan Gilbert, *Momentum Investment Group and University of Stellenbosch, South Africa*

Leveraging Explainable Hybrid AI and the Three Lines of Defense Model to Reduce Non-Technical Losses in Electricity Distribution Networks.

Obumneme Nwafor, *Glasgow Caledonian University, Scotland, United kingdom*

Green IA: Environmental Cost of a Time Series Prediction Contest

Alfredo Garcia-Hiernaux, *Universidad Complutense de Madrid, Spain*

#Canceled! Exploring the Phenomenon of Canceling

Babak Zafari, *Georgetown University McDonough School of Business, USA*

The Importance of Printed Power Sources for Printed Electronics

Martin Krebs, *Printa Battery, Germany.*

Slots available

Speech Recognition for the Kazakh Language: using Neural Networks and Deep Learning Techniques

Galym Kapyshev, *International Information Technology University, Kazakhstan*

Ensemble modeling approaches to analyse crop traits from airborne and Sentinel imagery

Miguel Quemada, *Universidad Politécnica de Madrid, CEIGRAM, 28040 Madrid, Spain*

How can physicians adopt AI-based applications in the United Arab Emirates to improve patient outcomes

Tarek Mansou, *Bachelor of Pharmacy from Cairo University, UAE.*

Slots available

Binary Associative Memory Networks: A Review of Mathematical Framework and Capacity Analysis

Han Bao, *Shandong University of Science and Technology, China*

Bio-Inspired Underwater Localization: A Joint Active-Passive Electrolocation Approach

Jiegang Peng, *University of Electronic Science and Technology of China, China.*

Framework for integrating Metabolic Network and Regulatory Network for optimizing the production of desired metabolites

Kauthar Mohd Daud, *Universiti Kebangsaan Malaysia, Malaysia*

Analyzing central bank communication using natural language processing: Evidence from a large, emerging economy

Rajeswari Senugupta, *Indira Gandhi Institute of Development Research, Mumbai, India.*

Slots available

Slots available

Day, 2 May 20 2025

Reimaging Unsaturated Soil Behaviour Prediction with AlphaGeo-Inspired AI and Advanced Plasticity Model

Liuxin Chen, *Monash University, Melbourne, Australia*

Towards a Cooperative Urban Ecosystem: Integrating ITS and CCAM Technologies for a Safer Future Mobility

David Yague-Cuevas, *University Carlos III de Madrid, Spain.*

Faculty and students perspectives towards game-based learning in health sciences higher education

Mead Maady Alqahtany, *King Saud bin Abdul-Aziz University for Health Sciences, Jeddah, Saudi Arabia*

Navigating the Ethical Landscape of Robotics

Zainab Khalid Mohammed, *University Tenaga National, Iraq.*

Slots available

Research on Active Safety Defense System for Refrigerant Leakage Fault in R290 Room Air Conditioners

Jianghong Wu, *South China University of Technology, China*

Sensor-based and Visual Behavioral Profiling of Dry Holstein Cows Presenting Distinct Median Core Body Temperature

Raphael Saraiva, *Kansas State University, USA.*

Energy Management System Using Machine Learning and Multi-Criteria Decision Support

Massimiliano Ferrara, *Mediterranea University of Reggio Calabria & Bocconi University, Italy*

Slots available

Investigating green hydrogen production operated by redundant energy on a solar PV mini-grid through Matlab simulation and artificial neural network

Gidphil Mensah, *Kwame Nkrumah University of Science and Technology, Ghana*

Robot Motion Adaptation: Addressing Occlusion for Human Position Reconstruction in Collaborative Environments via Depth Inpainting

Ambra Vandone, *University of Applied Science, Switzerland.*

Optimizing Prenatal Diagnosis and Therapy with AI: Advancements in Treating Rare Genetic Disorders

Hamid Reza Khorram Khorshid, *University of Social Welfare and Rehabilitation Sciences, Tehran, Iran*

Slots available

Energy optimization and digitization of the photovoltaic using sun path tracker systems installed in a robot

Abdellatif Hraich, *ENSA University Abdelmalek Essaadi, Morocco.*

Investigating the Potential of Artificial Intelligence in Managing Biological Aging and Treating Related Disease

Sara Darbandi, *Gene Therapy and Regenerative Medicine Research Center, Hope Generation Foundation, Tehran, Iran*

Ant colony optimization algorithm for the three-dimensional bin packing problem with rotation

Denis Borenstein, *Federal University of Rio Grande do Sul, Brazil*

Slots available

Slots available

Day, 3 May 21 2025

Artificial Intelligence Breakthroughs in Pioneering Early Diagnosis and Precision Treatment of Breast Cancer: A Multimethod Study

Nima Darbandi, *Icahn school of medicine at Mount Sinai, New York, USA*

Guidelines, Strategies, and Policies for Addressing AI-Enabled Academic Integrity Issues in Education

Ahmadreza Mohebbi, *University of Auckland, New Zealand*

Parameter optimization and signal comparison of particle detection sensors based on planar coils and different core materials

Yuqing Sun, *Dalian Maritime University, PR China.*

Artificial Intelligence in Cytopathology and Histopathology of Cancer: The Evolution to Precision Pathology

Priya Hays, *Georgetown University, United States*

Slots available

Optimizing Early Detection of Reproductive Cancers with an AI-Based Gene Panel

Mahsa Darbandi, *Department of Oncological Sciences, Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, Iran*

Portfolio practices in the principal evaluation process: A qualitative case study

Ahmed Alkaabi, *Foundations of Education Department, United Arab Emirates University, United Arab Emirates*

MedicoBERT: A medical language model for Spanish NLP tasks with an application in question-answering using hyperparameter optimization

Alma-Delia Cuevas, *Autonomous University of the State of Mexico, Mexico*

Slots available

How Humanitarian Technology and Robotics Improve Lives at the Base of the Pyramid (BoP)

Albert W.Y. Ko, *Lingnan University, Hong Kong.*

Hemaclassify: Blood Diseases Classification Model Utilizing High-Resolution Neural Networks

Afzan Adam, *Universiti Kebangsaan Malaysia, Malaysia*

Bridging Human-Robot Interaction Gaps through Advanced Natural Language Processing

Konstantinos Kalodanis, *Harokopio University of Athens, Greece*

Cross-section or Time-series: Return Forecasting in Cryptocurrency

Jia Zhai, *International Business School Suzhou at XJTLU, China*

Slots available

Slots available

Poster Forum-1

A Fast Wide-Range Air Balancing Control Method Based on Deep Reinforcement Learning

Fanyong Cheng, *Anhui Polytechinic University, Wuhu, China*

Slots available

Quality control of stroke screening using deep embedding for automatic classification of arterial segments

Chung-Ming Lo, *National Chengchi University, Taiwan*

Slots available

Slots available

Online Forum-1

Enhancing Autonomous Vehicle Perception with Synthetic Data: Tackling Class Imbalances in Critical Scenarios

Chandra Jaiswal, *North Carolina Agricultural and Technical State University, United States.*

Cooperative operation method of seedling conveying and picking byfull- automatic transplanter based on multi-sensor combination

Mengjiao Yao, *Agricultural Engineering at Jiangsu Univisity, China.*

Slots available

Slots available

Slots available

Networking and day closing

Top Sights in Osaka