Record Nr. UNISA996630860303316 Autore Mathieu Philippe Titolo Advances in Practical Applications of Agents, Multi-Agent Systems, and Digital Twins: The PAAMS Collection: 22nd International Conference, PAAMS 2024, Salamanca, Spain, June 26-28, 2024, Proceedings // edited by Philippe Mathieu, Fernando De la Prieta Cham: .: Springer Nature Switzerland: .: Imprint: Springer, . 2025 Pubbl/distr/stampa **ISBN** 9783031704154 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (370 pages) Lecture Notes in Artificial Intelligence, , 2945-9141; ; 15157 Collana Altri autori (Persone) De la PrietaFernando Disciplina 006.3 Soggetti Artificial intelligence Data structures (Computer science) Information theory Software engineering Computer engineering Computer networks Artificial Intelligence Data Structures and Information Theory Software Engineering Computer Engineering and Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto PAAMS MAIN TRACK -- Distributed Optimization of Charging Station Selection of Electric Vehicles -- A Deep Reinforcement Learning Approach to Battery Management in Dairy Farming via Proximal Policy Optimization -- Reinforcement Learning Enabled Peer to Peer Energy Trading for Dairy Farms -- Benchmarking Large Language Models for Multi Agent Systems A Comparative Analysis of AutoGen CrewAl and TaskWeaver -- Multi Agent Opinion Pooling by Voting for Bins Simulations and Characterization -- Neural Cellular Automaton for

Decentralized Inference in Distributed Manipulator System -- Synthetic data generation for machine learning models with cognitive agent simulations -- A Digital Twin approach to Building's Dossier for Seismic

Prevention -- MineLlama Llama with Retrieval Augmented Generation as A Decision Maker in Minecraft -- Learning Automata Strategies for Prolonging Lifetime of Wireless Sensor Networks -- Options to Speed up Search in Lifelong Multi Agent Pathfinding -- Cooperative Task Execution in Multi Agent Systems -- Federated Neural Machine Translation Using Multi Agent Reinforcement Learning -- A Decentralized Agent based Model for Crisis Events Using Embedded Systems -- Human and BDI Agent Interaction via KQML messages over IMAP and SMTP -- Models of Intelligent Tutoring Systems Based on Autonomous Agents for Virtual Learning Environments a Systematic Literature Review -- Dynamic estimation of customer movement by agent based simulation with particle filter -- Retrieval Augmented Generation Powered by a Multi Agent System to Assisted the Operation of Industries -- EGAR Environment Generator for Agent based Research -- Collaborating Digital Twins for Health Coaching -- Overcoming Computational Complexity A Scalable Agent Based Model of Traffic Activity using FLAME GPU -- Measuring Fairness in AI Explanations with LEADR Local Explanation Amplification Disparity Ratio -- Adaptive Learning of Centralized and Decentralized Rewards in Multi agent Imitation Learning -- Integrating Supervised and Reinforcement Learning for Heterogeneous Traffic Simulation -- Dynamic modification of agent behaviours without disrupting a running system -- A Machine Learning Based Trading Strategy Integrating Technical Analysis and Multi Agent Simulation -- PAAMS DEMONSTRATIONS -- AAMA Sim A Gazebo and ROS2 based Simulation Tool for Agent based Modelling of Cyber-physical Systems -- Using an Agent Based Cellular Automaton for Emergency Evacuation Simulation -- A pet robot prototype for animal assisted therapy -- Demo of the Agri RO5 architecture for Agrirobot Fleet Simulation -- Implementation of Real Time Local Search Method for Distributed Constraint Optimization with Message Loss in PubSub Communication -- Developing Safe Autonomous Logistic Systems with vGOAL.

## Sommario/riassunto

This book constitutes the refereed proceedings of the 22nd International Conference on Practical Applications of Agents and Multi-Agent Systems, PAAMS 2024, held in Salamanca, Spain, during June 26-28, 2024. The 26 full papers and 6 short papers included in this book were carefully reviewed and selected from 64 submissions. The PAAMS 2024 proceedings focus on the development and deployment of agents and multi-agent systems and their real-world applications.