

Article	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Raw Score	Applicable Items	Normalized (%)
A Centralized Task Allocation Algorithm for a Multi-Robot Inspection Mission with Sensing Specifications	1	1		2				1	2	1	8	6	66.67%
A Dynamic Routing Strategy for the Traffic Control of AGVs in Automatic Warehouses	2	1	1		2		1	2	2	2	13	8	81.25%
A Hierarchical Approach for Joint Task Allocation and Path Planning	2	1	2	2				1	2	2	12	7	85.71%
A multi-agent system using fuzzy logic to increase AGV fleet performance in warehouses	2	1	1		2			1	2	2	11	7	78.57%
A preliminary study about multi-robot task allocation with energy constraints	2	1		1			1	1	1	2	9	7	64.29%
A probabilistic Eulerian traffic model for the coordination of multiple AGVs in automatic warehouses	2	2			2			1	1	2	10	6	83.33%
A Routing and Task-Allocation Algorithm for Robotic Groups in Warehouse Environments	2	1	2	2				1	1	2	11	7	78.57%
A Rules and Communication Based Multiple Robots Transportation System	2	2			2	1	1	2	1	2	13	8	81.25%
Abnormal Automated Guided Vehicles Detection for Fleet Management Systems: A Reputation-based Distributed Velocity Estimation Approach	2	0				1		1	1	1	6	6	50.00%
AGV Traffic Management in Automated Industrial Plants: An Enhanced Lifelong Multi-Agent Path Finding Approach	2	2			2	1		1	1	2	11	7	78.57%
An Approach Towards Automated Navigation of Vehicles using Overhead Cameras	1	1	2				1	2	1	1	9	7	64.29%
An Autonomous Mobile Robot Navigation Architecture for Dynamic Intralogistics	2	2	1				1	1	1	2	10	7	71.43%
An End-to-End Deep Reinforcement Learning Based Modular Task Allocation Framework for Autonomous Mobile Systems	2	1		2			1	2	1	2	11	7	78.57%
An Extension of BIM Using AI: A Multi Working-Machines Pathfinding Solution	1	1			1			1	2	2	8	6	66.67%
An Incremental Planning Strategy-Based Genetic Algorithm for Integrated Scheduling and Routing Optimization in Smart Manufacturing	2	1		1				1	2	1	8	6	66.67%
An Integrated Timetable Optimization and Automatic Guided Vehicle Dispatching Method in Smart Manufacturing	2	1		2				1	2	1	9	6	75.00%
Anytime Lifelong Multi-Agent Pathfinding in Topological Maps	2	2	1		2	2		1	2	2	14	8	87.50%
Autonomous transport vehicles: Where we are and what is missing	2	2	2	1		1	1	2	1	2	14	9	77.78%

Centralized Robotic Fleet Coordination and Control	2	1				1	1	1	1	1	8	7	57.14%
Centralized versus Distributed Nonlinear Model Predictive Control for Online Robot Fleet Trajectory Planning	2	1	2				2	1	2	2	12	7	85.71%
Collision-free allocation of temporally constrained tasks in multi-robot systems	2	1		2			1	1	2	2	11	7	78.57%
Conflict-Based Task and Motion Planning for Multi-Robot, Multi-Goal Problems	2	2	2		1		1	1	2	2	13	8	81.25%
Control of heterogeneous AMHS in semiconductor industry under consideration of dynamic transport carrier transfers	1	1		1				1	1	1	6	6	50.00%
Cooperative Guidance of Lego Mindstorms NXT Mobile Robots	0	1					2	2	2	1	8	6	66.67%
Deadlock avoidance algorithm for AGVs on a tessellated layout	2	1				2		1	1	2	9	6	75.00%
Decentral task allocation for industrial AGV-systems with resource constraints	2	1		2				1	2	2	10	6	83.33%
Decentralized and prioritized algorithm for AGV fleet management	2	2			2	2		1	2	2	13	7	92.86%
Decentralized Deadlock Prevention for Self-Organizing Industrial Mobile Robot Fleets	2	0				2			1	1	6	5	60.00%
Decentralized Market-Based Task Allocation Algorithm for a Fleet of Industrial Mobile Robots	2	2		2	1		1	1	2	2	13	8	81.25%
Decentralized Receding Horizon Motion Planner for Multi-robot with Risk Management	2	1	2				1	1	1	2	10	7	71.43%
Demo: Model of Distributed Sorting System with Robotic Agents	1	1					1	1	1	1	6	6	50.00%
Designing Heterogeneous Robot Fleets for Task Allocation and Sequencing	2	1		2				1	2	2	10	6	83.33%
Development of a Fleet Management System for Multiple Robots' Task Allocation Using Deep Reinforcement Learning	2	2	1	1			1	1	2	2	12	8	75.00%
Distributed Fleet Management in Noisy Environments via Model-Predictive Control	2	1		2				1	1	2	9	6	75.00%
Distributed Fuzzy Semi-Infinite Auction Based Optimization for Cooperative Robots Tasks Allocation	1	1		2				1	1	2	8	6	66.67%
DTA-HMR-TT: Dynamic Task Allocation for a Heterogeneous Team of Mobile Robots with Task Transfer	2	1		2			1	1	2	2	11	7	78.57%
Efficient Multi-Robot Cooperative Transportation Scheduling System	1	2		2	1			2	2	2	12	7	85.71%

Efficient multi-robot path planning in real environments: a centralized coordination system	2	2	2		1	2	1	2	2	2	16	9	88.89%
Efficient Task Allocation in Smart Warehouses with Multi-Delivery Stations and Heterogeneous Robots	2	1		2				1	2	2	10	6	83.33%
Energy Efficient Multi-Robot Task Allocation Constrained by Time Window and Precedence	2	1		1				1	2	2	9	6	75.00%
Ensemble Coordination Approach in Multi-AGV Systems Applied to Industrial Warehouses	2	1	1	1	2	1		2	2	2	14	9	77.78%
Entropy-based coordination for maintenance tasks of an autonomous mobile robot system	2	2		1				1	1	1	8	6	66.67%
Extending a Refinement Acting Engine for Fleet Management: Concurrency and Resources	1	1		2				1	1	2	8	6	66.67%
Fault Diagnosis and Identification in AGVs System	2	1							0	0	3	4	37.50%
Federated Discrete Reinforcement Learning for Automatic Guided Vehicle Control	2	2	2					1	1	2	10	6	83.33%
Fleet Management System for an Industry Environment	2	1	1		2	2	1	1	2	2	14	9	77.78%
Fleet Management System for Autonomous Mobile Robots in Secure Shop-floor Environments	2	1		2				2	1	1	9	6	75.00%
Fleet management system for mobile robots in healthcare environments	2	2	1	1				0	1	1	8	7	57.14%
Group-Based Distributed Auction Algorithms for Multi-Robot Task Assignment	2	1		2				1	2	2	10	6	83.33%
Health-aware fault-tolerant control of multiple cooperating autonomous vehicles	1	1			1			1	1	1	6	6	50.00%
Hierarchical and Flexible Traffic Management of Multi-AGV Systems Applied to Industrial Environments	2	2	2		2		1	2	1	2	14	8	87.50%
Hierarchical Multi-Robot Fleet Architecture with a Kinematics-adaptive Drive System	1	1	1					2	1	1	7	6	58.33%
Hierarchical Traffic Management of Multi-AGV Systems With Deadlock Prevention Applied to Industrial Environments	2	2	2		2	2	1	2	2	2	17	9	94.44%
Highly-scalable traffic management of autonomous industrial transportation systems	2	2	2	1	2	2	1	2	2	2	18	10	90.00%
Integrated Motion Planning and Coordination for Industrial Vehicles	2	1		2				1	2	2	10	6	83.33%
Integrating collision avoidance strategies into multi-robot task allocation for inspection	2	1	1				1	1	2	2	10	7	71.43%

Integrating Mission and Task Planning in an Industrial Robotics Framework	2	1	2					1	1	1	8	6	66.67%
Layered-Cost-Map-Based Traffic Management for Multiple AMRs via a DDS	2	2			2	1	1	2	2	1	13	8	81.25%
MAPFASTER: A Faster and Simpler take on Multi-Agent Path Finding Algorithm Selection	2	1	2					1	1	1	8	6	66.67%
Methodology for a Gradual Migration from a Centralized towards a Decentralized Control in AGV Systems	2	0	1	1		1		0	1	2	8	8	50.00%
Mitigating Emergency Stop Collisions in AGV Fleets in Case of Control Failure	2	1					1	1	2	2	9	6	75.00%
Motion Planning and Goal Assignment for Robot Fleets Using Trajectory Optimization	2	1	1				2	1	1	2	10	7	71.43%
Multi-Agent Routing Value Iteration Network	2	2	1					1	1	1	8	6	66.67%
Multiple robots avoid humans to get the jobs done: An approach to human-aware task allocation	2	1	1	2			2	2	2	2	14	8	87.50%
Multi-Robot Cooperation in the MARTHA Project	2	2	1			1	1	2	1	2	12	8	75.00%
Multi-Robot Path Planning with Maintenance of Generalized Connectivity	0	0	2					2	1	1	6	6	50.00%
Multi-Robot Task Allocation and Scheduling Considering Cooperative Tasks and Precedence Constraints	2	1		2				1	1	2	9	6	75.00%
Multi-Robot Task Allocation for Real-Time Hospital Logistics	2	1		2				2	1	2	10	6	83.33%
On Null Space-Based Inverse Kinematics Techniques for Fleet Management: Toward Time-Varying Task Activation	1	1			2			2	1	1	8	6	66.67%
On Troubleshooting in AGV-based Autonomous Systems	2	0						0	0	1	3	5	30.00%
Online Conflict-Free Scheduling of Fleets of Autonomous Mobile Robots	2	2	2	2	1			1	1	2	13	8	81.25%
Open interfaces for connecting automated guided vehicles to a fleet management system	2	1	1					2	0	1	7	6	58.33%
Operating a Large Fleet of Mobile Robots using the Plan-Merging Paradigm	2	2	1	1			1	2	1	2	12	8	75.00%
Path Planning and scheduling for a fleet of autonomous vehicles	2	1	2	2			1	1	1	2	12	8	75.00%
Planning the tasks of an autonomous mobile robot fleet for internal logistics of production systems	2	1		2				0	1	1	7	6	58.33%
Predicting Conflict Zones on Terrestrial Routes of Automated Guided Vehicles with Fuzzy Querying on Apache Kafka	1	1					2	2	1	2	9	6	75.00%

Priority-Based Distributed Coordination for Heterogeneous Multi-Robot Systems With Realistic Assumptions	2	1	1				1	2	2	1	10	7	71.43%
Queue Formation and Obstacle Avoidance Navigation Strategy for Multi-Robot Systems Based on Deep Reinforcement Learning	1	1	2		1		2	2	2	2	13	8	81.25%
Real-Time Fastest Path Algorithm using Bidirectional Point-to-Point Search on a Fuzzy Time-Dependent Transportation Network	0	1	2					0	0	0	3	6	25.00%
Resource management in decentralized industrial Automated Guided Vehicle systems	2		1					2	1	0	6	5	60.00%
Robofleet: Open Source Communication and Management for Fleets of Autonomous Robots	2	1						2	1	0	6	5	60.00%
Route Selection in Mixed-Fleet Warehouses	2	1			1	2		1	1	1	9	7	64.29%
Safe Human-Robot-Interaction in Highly Flexible Warehouses using Augmented Reality and Heterogenous Fleet Management System	2	1					1	0	0	0	4	6	33.33%
Scalable and heterogenous mobile robot fleet-based task automation in crowded hospital environments—a field test	2	2	0	1			1	2	2	1	11	8	68.75%
Simultaneous auctions for "rendez-vous" coordination phases in multi-robot multi-task mission	1	1	0	1				2	2	2	9	7	64.29%
Smart Fleet Solutions: Simulating Electric AGV Performance in Industrial Settings	2	2	1	1				2	1	1	10	7	71.43%
Smart mobile robot fleet management based on hierarchical multi-agent deep Q network towards intelligent manufacturing	2	1	2	2				2	2	1	12	7	85.71%
Sorting Space Configuration Comparison for the Multi-Agent Robotic Sorting System	2	1	2	1	1	1		2	1	1	12	9	66.67%
The Development of Fleet Management System for Mobile Robots Delivering Medicine in Healthcare Environments	2	1	1	2				2	1	1	10	7	71.43%
Traffic Management of Multi-AGV Systems by Improved Dynamic Resource Reservation	2	1	1	1	2	2		2	2	1	14	9	77.78%
Trajectory Prediction of Moving Workers for Autonomous Mobile Robots on the Shop Floor	1	0	2				2	2	1	1	9	7	64.29%
Validation of a time based routing algorithm using a realistic automatic warehouse scenario	2	1	2	0			1	1	1	1	9	8	56.25%
Why interoperability is critical to the warehouse of the future	2								0	0	2	3	33.33%