MASSpace'24

International Workshop on Autonomous Agents and Multi-Agent Systems for Space Applications

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Motivations and objectives

- Disseminating and sharing **recent advances** in the use of agent-based and multi-agent-based models and techniques in the Space domain
- The use of agent-based and multi-agent systems in aerospace and space is **gaining traction**
- Promising approaches for **modeling and solving distributed, complex and dynamic problems**
- **Multiple applications**: multiple spacecraft operations and maintenance, onboard-ground coordination, mission simulation, multi-mission operation, autonomous navigation, collective robotics…
- **Cross-fertilization** of AAMAS and Space
    - Provide Space domain experts with the means to use these multi-agent models and techniques
    - Challenge multi-agents models and techniques with novel problems coming from the Space domain

Programme

https://mas-space.github.io/aamas2024ws/#programme

0855-0900		Introductory remarks
0900-1000		Invited talk
1000-1030		Coffee break
1030-1230		Session 1
	1030-1055	*Lunar Leader: Persistent, Optimal Leader Election for Multi-Agent Exploration Teams*
	1055-1120	*CADRE MoonDB: Distributed Database for Multi-Robot Information-Sharing and Map-Merging for Lunar Exploration*
	1130-1155	*DRIFT: Deep Reinforcement Learning for Intelligent Floating Platforms Trajectories*
	1155-1220	*Integrated Modeling and Planning for On-Orbit Assembly of Large Space Structures with Mobile Crawling Robots*
1230-1400		Lunch break
1400-1515		Session 2
	1400-1425	*Going Beyond Mono-Mission Earth Observation: Using the Multi-Agent Paradigm to Federate Multiple Missions*
	1425-1450	*Hierarchical Temporal Planning in an Earth Observation Satellite Software Architecture*
	1450-1515	*Understanding Drill Data for Autonomous Application*
1515-1530		Closing remarks

Invited talk

“ Multi-agent autonomy on the Moon: NASA' Coordinated Autonomous Distributed Robotics Explorers (CADRE) mission”

Federico Rossi, NASA JPL, USA

Have a nice workshop!