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Information Sciences**
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Real Time Multi-agent Path Planning for Disaster Recovery, Case Study: RoboCup Rescue

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List of Abbreviations

A*	A-Star global planning technique
AAAI	Association for the Advancement of Artificial Intelligence
ACE	Adaptive Communication Environment
API	Application Programming Interface
CLR	Common Language Runtime
CORBA	Common Object Request Broker Architecture
COTS	Commercially available Off-The-Shelf
CPAD	Checkpoint Priority Action Database
DCE/RPC	Distributed Computing Environment/Remote Procedure Calls
DCOM	Distributed Component Object Model
DII	Dynamic Invocation Interface
DOC	Distributed Object Computing
DSI	Dynamic Skeleton Interface
E-GAP	Extended Global Assignment Problem
GAP	Global Assignment Problem
GIOP	General Inter-ORB Protocol
GIS	Geographic\Geometric Information System
GMAS	Geospatial Multi-Agent System
GML	Geographic Markup Language

GPS	Global Positioning System
HTTP	Hypertext Transfer Protocol
IDL	Interface Definition Language
IEEE	Institute of Electrical and Electronics Engineers
IIOP	Internet Inter-ORB Protocol
J2EE	Sun's Java 2 Enterprise Edition
JVM	Java Virtual Machine
KB	Knowledge Base
KML	Keyhole Markup Language
MAP	Multi-agent Planning
MAPP	Multi-agent Path Planning
MAS	Multi-agent Systems
MOAST	Mobility Open Architecture Simulation and Tools
MRS	Microsoft Robotics Studio
NIST	National Institute of Standard Technologies
OGC	Open Geospatial Consortium
OMA	Object Management Architecture
OMG	Object Management Group
ORB	Object Request Broker
OS	Operating System
PFM	Potential Fields Method

POA	Portable Object Adapter
PRM	Probabilistic Roadmaps
RCR	RoboCup Rescue
RMI	Remote Method Invocation
RPC	Remote Procedure Call
RRT	Rapidly Exploring Random Trees
RT-CORBA	Real-Time Common Object Request Broker Architecture
SOA	Service Oriented Architecture
SOAP	Simple Object Access Protocol
SP	Special Points
SQL	SQL Structured query language.
SQLSS	SQL Server Spatial
SRID	Spatial Reference ID
TAO	The ACE ORB
TCP/IP	Transmission Control Protocol/Internet Protocol
USAR	Urban Search and Rescue
UDDI	Universal Description, Discovery and Integration
XML	eXtensible Markup Language

List of Publications

- 1- Heba Gaber, Safaa Amin, Abdel-Badeeh M. Salem, "A Combined Coordination Technique for Multi-Agent Path Planning", IEEE, Proceedings of Intelligent Systems Design and Applications (ISDA), Cairo - Egypt, IEEE Catalog Number: CFP10394-CDR, pp.563-568, 2010.
 - 2- Heba Gaber, Safaa Amin, Abdel-Badeeh M. Salem, "Geospatial Multi-agent Systems for Urban Search and Rescue", Recent Researches in Computer Sciences, Proceedings of 15th WSEAS International Conference on Computers, ISSN: 1792-4251, Greece, pp.76-81, 2011.
 - 3- Heba Gaber, Safaa Amin, Abdel-Badeeh M. Salem, "Corba-Based Multi-Agent System for Realistic Urban Search and Rescue", Proceedings of the International Conference on Electronics, computers and artificial intelligence (ECAI), Series: Electronics, Computers and Artificial Intelligence, ISSN 1843–2115, Romania, vol.7-20, pp.103-112, 2011.
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