Defense Industry Applications Of Autonomous Agents And Multi-agent Systems

Peer-to-peer Collision Avoidance (IPPCA);89 7.4.3;4.3. Multi-Party Collision Avoidance (MPCA);91 7.4.4;4.4. Non-Cooperative Collision Avoidance Architecture;93 7.5;5. Multi-layer Collision Avoidance Architecture;94 7.6;6. Deployment Scenarios and Selected Experimental Results;94 7.7;7. Conclusion;99 7.8;Acknowledgement;100 7.9;Appendix A. A-globe Multi-Agent Platform;101 7.10;References;103 8;Controlling Teams of Uninhabited Air Vehicles;106 8.1;1. Introduction;106 8.1.1;1.1. Concept;106 8.1.2;1.2. Scenario;107 8.1.3;1.3. Overview;107 8.2;2. Variable Autonomy;107 8.3;3. System Overview;109 8.4;4. Multi-Agent System;110 8.4.1;4.1. User Agent;111 8.4.2;4.2. Group Agents;111 8.4.3;4.3. Specialist Planning Agents;111 8.4.3.1;4.3.1. Search Agent.;112 8.4.3.2;4.3.2. Attack Agent.;112 8.4.4;4.4. UAV Agents;112 8.5;5. Example Run;113 8.6;6. System Integration Issues;114 8.6.1;6.1. Reactive and Deliberative Planning;115 8.6.2;6.2. Communication;116 8.6.3;6.3. Logging and Debugging;116 8.6.4;6.4. Test Harness;117 8.7;7. Trials Results;117 8.7.1;7.1. System Performance;117 8.7.2;7.2. Trust;118 8.8;8. Summary;118 8.8.1;8.1. Related Work;118 8.8.2;8.2. Conclusions;119 8.9;References;120 8.10;Acknowledgment;121 9;Simulating Fighter Pilots;122 9.1;1. Thinking Quickly and Clearly;122 9.2;2. Agents in Deployed Simulations;124 9.2.1;2.1. F/A-18 Hornet;125 9.2.2;2.2. Airborne Early Warning and Control;126 9.2.3;2.3. Strike Tactics;127 9.2.4;2.4. Maritime Surveillance;128 9.3;3. Agent Research and Development;129 9.3.1;3.1. Age EAN/ISBN : 9783764385712 Publisher(s): Springer, Berlin, Birkhuser Discussed keywords: Multi-Agent Systems, Software-Agenten Format: ePub/PDF Author(s): Pechoucek, Michal - Thompson, Simon G. - Voos, Holger

Multiagent Systems