ARTIFICIAL INTELLIGENCE RESEARCH INITIATIVES FOR SIMULATION AND TRAINING

DEVCOM Soldier Center will present a variety of research initiatives focusing on the use and development of artificial intelligence in the simulation and training domain. Presentations from senior researchers will cover a wide range of topics, including team performance assessment, computer vision, data architectures, synthetic behavior generation, and more.

A full schedule of presentations is seen below.

Tuesday - 3 DEC

1330-1500 - *Artificial Intelligence Research for Simulation and Training Overview, including:*

1. Dynamic Synthetic Behavior Generation - Agent Architecture Research
2. AI for Automated Simulation Management
3. Computer Vision for Automated Medical Performance Assessment and After Action Review
4. AI-Driven Team Communication Analytics and Competency-Based Scenario Generation
5. Architecture & Infrastructure to Drive Automated Assessment with a Computer Vision Example

Wednesday - 4 DEC

1100-1145 - *Dynamic Synthetic Behavior Generation: Agent Architecture Research*

1230-1315 - *Dynamic Synthetic Behavior Generation: Insights on Hierarchical Reinforcement Learning Approaches*

1500-1600 - *Artificial Intelligence for Training and Performance Assessment Overview, including:*

1. Dynamic Synthetic Behavior Generation - AI applied to Behaviors in Computer Generated Forces
2. Automated Simulation Management - AI Enabling Optimal Simulation Environments
3. Computer Vision for Automated Medical Performance Assessment and After Action Review

Thursday - 5 DEC

1200-1245 - *Automated Simulation Management: Applications of Genetic Algorithms and Large Language Models to Efficient Simulation Execution*

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