Title: Advancing the Layered Approach to Agent-based Crowd Simulation

Time & Location:
2:00pm, Friday, September 2, 2011
Tec 205 (Vislab), Bobby Chain Technology Building

Presenters:
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Abstract: We adapt a scalable layered intelligence technique from the game industry, for agent-based crowd simulation. We extend this approach for planned movements, pursuance of assignable goals, and avoidance of dynamically introduced obstacles/threats, while keeping the system scalable with the number of agents. We exploit parallel processing for expediting the pre-processing step that generates the path-plans offline. We demonstrate the various behaviors in a hall-evacuation scenario, and experimentally establish the scalability of the frame-rates with increasing number of agents.