



Time	Schedule
9:00 Opening 9:10 Invited talk	<p style="text-align: center;"><b><u>Invited speaker: Shlomo Zilberstein</u></b></p> <p>Plan recognition is an essential component of multiagent decision making. We examine plan recognition in this context and show that existing algorithms for multiagent planning can perform plan recognition implicitly. Furthermore, it is possible to cast specific variants of the plan recognition problem so that they can be tackled explicitly using existing POMDP, Dec-POMDP, or POSG algorithms. Doing so, we gain a precise definition of the objective of plan recognition in the context of a broader multiagent interaction problem. Furthermore, we can leverage powerful existing planning algorithms in order to perform plan recognition. However, from a computational complexity perspective, we argue that there is much to be gained by creating new frameworks that allow more explicit reasoning about the plans of other agents. We illustrate this by examining several other aspects of multiagent planning that are tackled implicitly by existing algorithms, but can benefit from a more explicit treatment.</p>
9:45am - 10:30am	Presentations(15 minutes per paper) <ul style="list-style-type: none"> <li>● 13: Solving Navigation-Based Goal Recognition Design Problems with Action Graphs</li> <li>● 12: Information Shaping for Enhancing Goal Recognition</li> <li>● 31: A Unifying Perspective of Plan, Activity, and Intent Recognition</li> </ul>
10:30am - 11:00am	Coffee break
11:00am - 12:00am	Presentations (15 minutes per paper) <ul style="list-style-type: none"> <li>● 30: Constants in Plan Recognition and Planning</li> <li>● 25: Symbolic Inverse-Planning vs Deep-Learning Plan Recognition</li> <li>● 11: Real-Time Goal Recognition Techniques for Intrusion Detection on Attack Graphs</li> <li>● 2: An LSTM-Based Approach for Goal Recognition in Latent Space</li> </ul>
12:00am - 12:30am	Poster Session

12:30pm - 02:00pm	Lunch
02:00pm - 03:15pm	Presentations (15 minutes per paper) <ul style="list-style-type: none"> <li>● 7: Intention-based Behavioral Anomaly Detection</li> <li>● 1: GestARLite: An On-Device Pointing Finger Based Gestural Interface for Smartphones and Video See-Through Head-Mounts</li> <li>● 9: A Robust Online Human Activity Recognition Methodology for Human--Robot Collaboration</li> <li>● 15: A Framework to Counteract Suboptimal User-Behaviors in Exploratory Learning Environments: an Application to MOOCs</li> <li>● 24: Plan-Recognition-Driven Attention Modeling for Visual Recognition</li> </ul>
03:15pm - 03:45pm	Coffee break
03:45pm - 05:30pm	<p>04:00</p> <p style="text-align: center;"><b><u>Invited speaker: David Smith</u></b></p> <p>There has been increasing interest in the generation of behavior that is "understandable" or "interpretable" by an observer. In the Robotics and Planning communities, various notions have been introduced and investigated, including Explicability, Legibility, Predictability, Transparency, Privacy, Security, and Obfuscation. Not surprisingly, many of these notions are also related to goal and plan recognition. However, it is not always clear exactly how these notions relate to each other, or what assumptions are being made about the domain model and computational capabilities of the agent and observer.</p> <p>In this talk, I will attempt to impose some order on this zoo, by presenting a formal taxonomy of different forms of interpretability and un-interpretability. I will also point out some interesting variations and combinations that have not yet been considered or explored.</p> <p>This is joint work with Tathagata Chakraborti, Anagha Kulkarni, Sarath Sreedharan, and Rao Kambhampati.</p> <p>04:45</p> Presentations (15 minutes per paper) <ul style="list-style-type: none"> <li>● 21: A Unified Framework for Planning in Adversarial and Cooperative Environments</li> <li>● 22: Resource Bounded Secure Goal Obfuscation</li> </ul> <p>05:15</p> Concluding remarks