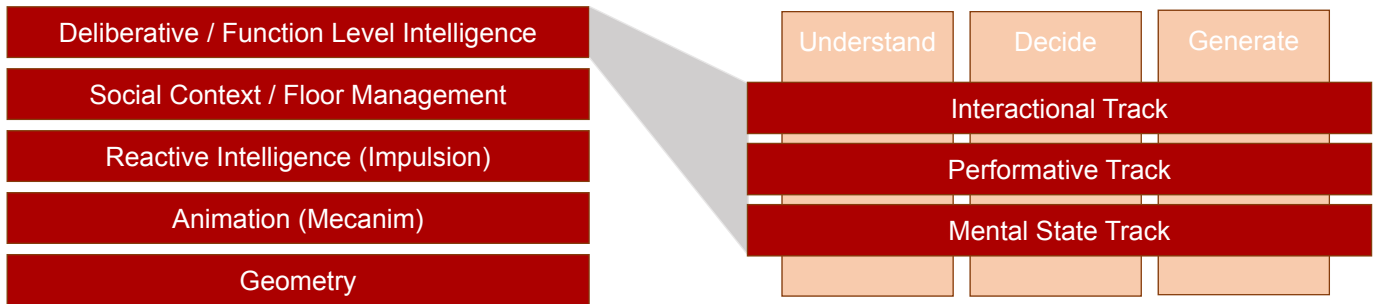




REYKJAVÍK UNIVERSITY

SOCIAL GATHERINGS IN VIRTUAL REYKJAVÍK

UNITY-BASED PLATFORM FOR SOCIAL AGENT RESEARCH. LAYERED APPROACH WHERE BASIC AGENTS INCLUDE AWARENESS OF SOCIAL TERRITORY AND SHOW REACTIVE TERRITORIAL MOVEMENT. HIGHER LAYERS INCLUDE FLOOR MANAGEMENT AND DELIBERATION OF ABSTRACT COMMUNICATIVE FUNCTION.



CONTINUOUS REACTIVE MOTION

A reactive social intelligence layer right above Unity's animation system ensures that the agents continuously adapt to their environment. The reactive behavior is dictated by social context and inner state. Deliberate social action, such as "request turn to speak" will also generate behavior.



GROUP CONVERSATION WITH PLAYERS

The human player is fully integrated into the social environment and can join groups of agents and strike up a conversation, subject to normal rules of turn-taking. The player avatar is simply one of the agents with additional means of control. Some automation is retained in the avatar, e.g. turn-taking behaviors. This is one of the first embodied conversational system in the Icelandic language.

IMPLEMENTS PROPOSED UNIFIED FML

Implements unified FML specification proposed in (Cafaro et al., 2014), which is organized around different tracks of communicative functions associated with each floor of interaction. Among other things, this separates basic interactional competency (e.g. turn-taking) from domain dependent knowledge.



LANGUAGE TRAINING AND DOMINANCE RESEARCH

Virtual Reykjavik is being used to provide an interesting dynamic social environment for Icelandic language and culture training. Students will need to interpret both verbal and nonverbal behavior. The platform is also used to experiment with dominance modeling. Dominant individuals influence the behavior of all group members, who become more submissive. Nonverbal cues of dominance include a more expansive posture.

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