DEIRA

A Dynamic Engaging Intelligent Reporter Agent

HTTP://WWW.QUEEQUEE.NET/DEIRA

Domain Input

DEIRA is an agent architecture that enables creation of agents that report on events as they take place. Domains such as virtual horse racing, storytelling and virtual soccer have already been added to the list of domains to which DEIRA has been applied.

Input Analysis (IAM)

The data from the input domain is analyzed by a domain-specific module, with as a result all the events that are potentially interesting. Together with an initial importance and decay, the event is submitted to the event queue.

Mental Modeling (MMM)

Emotional content is determined and attached to the events in the queue. The same content is also used to update the emotional state of the agent.

Text Generation (TGM)

Events that have been tagged with emotion are fed into a generative context free grammar and based on the emotional state and the discourse history, the text most appropriate for the event is selected.

Speech Adaptation (SAM)

Adaptations to accomodate for limitations in the TTS engine are made to the text. The emotional state of the reporter is accessed to determine speech characteristics such as pitch and speed.

Facial Animation (FAM)

Non-event related animations such as gaze and blinking are generated periodically. For all events, appropriate animations are selected based on the emotional content of the event and the current emotional state of the reporter.

EVENT QUEUEING (EQ)

Output (OM)

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