

The goal of this work is to design and implement a prototype of the episodic memory for virtual humans. The memory is inspired by up to date research on function of human memory for personal events (episodes) and human time perception. We design a model of memory based on this theoretical knowledge. We took as the point of departure episodic memory system and decision making system of Peskova. The decision making system is based on the BDI, theory of affordances and AND-OR trees. The former episodic memory suffered deficiencies in the recall for time-cued questions. Thus proposed model is working with a unique subsystem for the time perception which allows for more realistic storage and recall of past events. The agent enhanced by this model can reply to questions like "What did you do last week afternoons?". The prototype is programmed in Java using the framework Pogamut 2. Pogamut 2 is connected to the complex continuous 3D world of Unreal Tournament 2004 which allows us to verify the design in the challenging environment. We have conducted several experiments. The results show that the model extends agents cognitive abilities with a capability to understand socially established temporal patterns. That allows him to answer to the questions with a vaguely specified time information. Moreover, the memory has a limited capability to blend similar episodes together.