



Gesture Generation by Imitation: From Human Behavior to Computer Character Animation (Paperback)

By Michael Kipp

DISSERTATION.COM, United States, 2005. Paperback. Book Condition: New. annotated edition. 242 x 188 mm. Language: English Brand New Book ***** Print on Demand *****.In an effort to extend traditional human-computer interfaces research has introduced embodied agents to utilize the modalities of everyday human-human communication, like facial expression, gestures and body postures. However, giving computer agents a human-like body introduces new challenges. Since human users are very sensitive and critical concerning bodily behavior the agents must act naturally and individually in order to be believable. This dissertation focuses on conversational gestures. It shows how to generate conversational gestures for an animated embodied agent based on annotated text input. The central idea is to imitate the gestural behavior of a human individual. Using TV show recordings as empirical data, gestural key parameters are extracted for the generation of natural and individual gestures. The gesture generation task is solved in three stages: observation, modeling and generation. For each stage, a software module was developed. For observation, the video annotation research tool ANVIL was created. It allows the efficient transcription of gesture, speech and other modalities on multiple layers. ANVIL is application-independent by allowing users to define their own annotation schemes, it provides various...



Reviews

Extensive information for book fans. It is written in basic words and never hard to understand. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- **Otis Wisoky**

This publication is great. It is full of wisdom and knowledge. You will not really feel monotony at any time of the time (that's what catalogs are for relating to when you ask me).

-- **Dr. Everett Dicki DDS**