

Interactive Cognitive Modeling: Understanding and Supporting Individual Human Cognition

Junya Morita

Shizuoka University, Hamamatsu, Shizuoka, Japan

Abstract

Cognitive modeling, approximation of human cognitive functions in a computational system, is a traditional methodology in the field of cognitive science. Usually this methodology has been used as a tool for scientific understanding of human mind, and evaluated by fitting to human data. In this presentation, the author proposes a framework of interactive cognitive modeling as an application of the above methodology for understanding and supporting individual human cognition. The framework consists of cognitive architecture, visualization of the model behavior, knowledge database of personal user and sensing devices to include the users reaction. This presentation shows two systems of interactive cognitive modeling in the field of web browsing and photo browsing.