

Introduction to cognitive modelling with ACT-R

Organizers: Nele Russwinkel, Sabine Prezenski, Fabian Joeres, Stefan Lindner, Marc Halbrügge

Contributors: Fabian Joeres, Maria Wirzberger; Technische Universität Berlin, Germany

ACT-R is the implementation of a theory of human cognition. It has a very active and diverse community that uses the architecture in laboratory tasks others in applied research. ACT-R is oriented on the organization of the brain and is called hybrid architecture because it holds symbolic and subsymbolic components. The aim of working on cognitive models with a cognitive architecture is to understand how humans produce intelligent behavior. In this tutorial the cognitive architecture ACT-R is introduced (Anderson 2007). In the beginning we will give a short introduction of the background, structure and scope of ACT-R. Then we would like to start with hands-on examples how cognitive models are written in ACT-R. In the end of the tutorial we will give a short overview about recent work and its benefit for applied cognitive science.

References

Anderson JR (2007) How can the human mind occur in the physical universe? Oxford University Press, New York