

Update on the ACT-R FAQ

Frank Ritter

19 July 2003

The Act-R FAQ, acs.ist.psu.edu/act-r-faq/
Created 2002 with Natalie Shiskowski.
Needs to be updated, continually.

Nugget: **Useful and helpful now**
 (40-60 hits per month Spring 03)

Nugget/Goal: **Please refer people to it**

Coal: **Please pass updates to me.**
 This may require reading the FAQ.

Updates partially supported by ONR award number N00014-03-1-0248.

Recent Relevant Book published

Ritter, F. E., Shadbolt, N. R., Elliman, D., Young, R., Gobet, F., & Baxter, G. D. (2003). *Techniques for modeling human and organizational performance in synthetic environments: A supplementary review*. Wright-Patterson Air Force Base, OH: Human Systems Information Analysis Center.

iac.dtic.mil/hsiac/S-docs/SOAR-Jun03.pdf

We summarize selected recent developments and promising directions for improving the quality of models of human performance in synthetic environments. The potential uses and goals for behavioral models in synthetic environments are first summarized. We focus on the topics of providing more complete performance, on providing better integration of the models with synthetic environments and with each other (reusability), and improved usability of the models, an important but neglected aspect of their performance. Within this context, we review relevant, current work related to modeling. For example, we examine cognitive modeling of emotion, advanced techniques for testing and building models of behavior, new cognitive architectures including hybrid architectures, and agent and Belief, Desires and Intentions (BDI) architectures. A list of projects with high payoff for modeling human performance in synthetic environments is provided as a conclusion.