

Preliminary Schedule for ACT-R workshop 2008

Friday

8:00 Continental breakfast

8:45 Welcome

9:00 Five talks (20 minutes each)

The Brain

John Anderson and Angela Brunstein: Learning algebra by discovery: What's ACT got to do with it?

Jelmer Borst, Niels Taatgen, Andrea Stocco and Hedderik van Rijn: Locating the problem representation bottleneck in the brain.

Daniel Cassenti: Bringing EEG data into the ACT-R fold.

Terrence Steward and Chris Eliasmith: Implementing the ACT-R production system in spiking neurons.

Andrea Stocco, Christian Lebiere and John Anderson: Taking the procedural module seriously: a neural model of selection, execution, and learning in the basal ganglia.

10:40 Break

11:00 Four talks

Declarative Memory

Ion Juvina and Niels Taatgen: How do we ignore irrelevant information presented on displays?

Leendert van Maanen: An integrated model of sequential sampling.

Richard Young: A modular approach to modeling cognitive processes:

examining the encoding and recall of items in updating working memory.

Jong Kim, Frank Ritter and Richard Koubek: Explorations of the ACT-R architecture for learning and forgetting performance.

12:20 Lunch break (people have lunch on their own)

1:30 Four talks

Architecture

Glenn Gunzelmann: Confronting architectural drift in ACT-R

Frank Ritter, Michael Schoelles, Sue Kase and Laura Cousino Klein: Simulating pre-task appraisal of serial subtraction.

Christian Lebiere and Bradley Best: Architectural support for adversarial behavior.

Nele Pape and Leon Urbas: The influence of task demands in a model of time estimation.

2:50 Break

3:10 Invited speaker: John Laird

[The Future of Cognitive Architecture: Up, Down, and Sideways](#)

4:10 John Anderson: comments on the Future of Cognitive Architecture

4:40 Open discussion

6:00 Party

Saturday

8:00 Continental breakfast

8:45 Welcome

9:00 Five talks (20 minutes each)

Utility learning and Decision Making

Erik Altmann: Short-term decay of production values for cognitive control.

Christian Janssen, Wayne Gray and Michael Schoelles: How a modeler's conception of rewards influences a model's behavior: investigating ACT-R 6's utility learning mechanism.

Varun Dutt and Cleotilde Gonzalez: Instance and strategy ACT-R models of choice in a dynamic control task: a model comparison story.

Michael Schoelles, Wayne Gray and Hansjörg Neth: The Sudoku model: a dynamic decision maker.

Danilo Fum and Antonio Napoli: Putting new wine into old bottles: on the role of markers, instances and utilities in the Iowa gambling task.

10:40 Break

11:00 Four talks

Human-computer Interaction

Dario Salvucci: Using ACT-R for rapid prototyping and evaluation of in-vehicle interfaces.

Bonnie John: Making ACT-R typewrite right.

Leonghwee Teo and Bonnie John: Toward a tool for predicting goal-directed exploratory behavior.

Robert West: Building an SGOMS model (Sociotechnical GOMS) using ACT-R: Issues with cognitive modelling and macro cognition.

12:20 Lunch break (provided)

1:30 Four talks

Visual perception and skill acquisition

Scott Douglass: ACT-R's answers to six questions about visual routines.

Niels Taatgen and Daniel Dickison: Modeling eye-movement patterns in the Flight Management Task: combining bottom-up and top-down vision.

Matthew Walsh and John Anderson: Statistical learning and anticipatory start-point selection.

Clayton Stanley and Michael Byrne: Processes influencing visual search efficiency in conjunctive search: a rational analysis approach.

2:50 Break

3:10 Symposium

Kevin Gluck, Sue Kase, Glenn Gunzelmann and Brad Best: Large-scale computing resources and ACT-R modeling

4:30 The future of ACT-R and the ACT-R workshop

Sunday

8:00 Continental breakfast

8:45 Welcome

9:00 Five talks (20 minutes each)

Language and Integration

Jerry Ball: Modeling long-distance dependencies in double R language.

Markus Guhe and Ellen Gurman Bard: Adapting the use of attributes to the task environment in joint action: results and a model.

David Reitter, Frank Keller and Johanna Moore: Structural priming in language production emerging from learning in an ACT-R model.

Marc Destefano: The development of Lisp bindings for the D-bus interprocess communication system.

Mike Matessa: HBA: integrating task network modeling and ACT-R.

10:40 Break

11:00 Four talks

Robotics and Theory of Mind

Gregory Trafton, Magdalena Bugajska, William Kennedy, Anthony Harrison, Benjamin Fransen and Raj Ratwani: ACT-R/E: E for Embodied.

William Kennedy, Magdalena Bugajska, Anthony Harrison and Gregory Trafton: Simulation within ACT-R as a theory of mind.

Anthony Harrison, William Kennedy, Benjamin Fransen and Gregory Trafton: Exploring theory-of-mind

components within embodied robotics.

Eric Avery and Troy Kelley: ACT-R on a robot: considerations and extensions.

12:20 Adjourn