Quantitative Verification for Human-CPS

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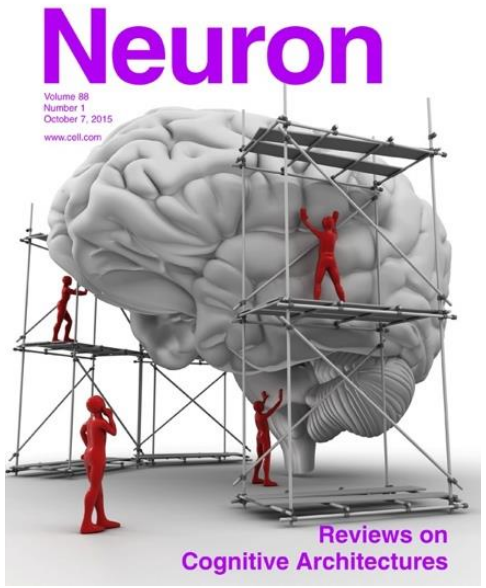
Bridge the gap

?

Human factors research

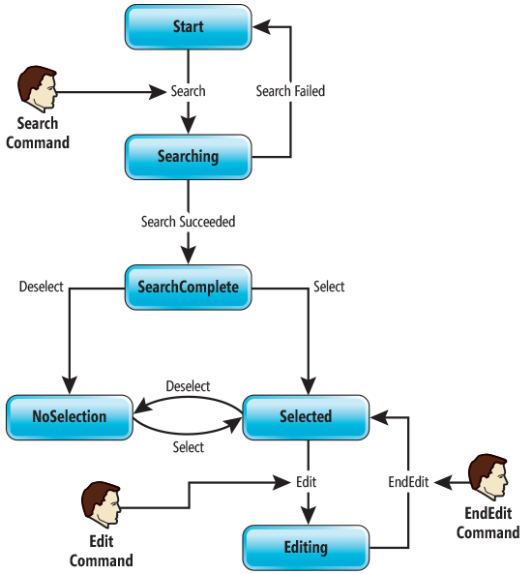
- Empirical studies
- Cognitive architectures



Too complex for verification/synthesis

Formal methods applications

- User interface models
- Mental models (state machines)



Not detailed enough for expressing rich human operator characteristics

<u>Exciting recent result:</u>

- A new logic PRTL* for reasoning about cognitive trust

<u>Lessons learned:</u>

- Collaboration with domain experts