Special session:

The "Complexity Brake," a Real or Imaginary Challenge to Human Level Machine Intelligence?

Aims and scope:

Some, like Microsoft cofounder Paul Allen (2011), believe that efforts to build human level machine intelligence will be thwarted by a dilemma known as the "complexity brake." He and his supporters anticipate a barrier to the creation of such Singularity-style machine intelligence that stems from our inability to capture the neural intricacies inherent to the more sacrosanct aspects of cognition such as creativity, and self-awareness.

This multi-disciplinary session, focused on higher-level thought, self-reflection, creative cognition and consciousness, will host experts from the fields of artificial intelligence, cognitive science, and philosophy to debate the existence of this so-called complexity brake through a series of presentations and panel discussions. AI practitioners are invited to present the latest biologically-inspired models of human cognition and report on how they plan to surmount, avoid, or acquiesce to this barrier. Cognitive neuroscientists are welcome to take a position, pro or con, based upon their perspectives on the brain dynamics and anatomy. Philosophers with a perspective on both AI and cognitive science may make their positions known as to the possibility of machines generating their own ideas or attaining consciousness.

Allen, P. and Greaves, M. (2011). Paul Allen: The Singularity Isn't Near,
Technology Review, MIT, available at
http://www.technologyreview.com/view/425733/paul-allen-the-singularity-isnt-near/

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