

Session 1:

The Bidirectionality of Neuroscience and AI

- **Topic 1a - The Unique Role of Neuroscience in the Past, Present, and Future of AI**
 - Ankit Patel, *Baylor College of Medicine & Rice University*
 - Ellie Pavlick, *Brown University*
- **Topic 1b - The Impact of AI on Neuroscientific Discoveries**
 - Jim DiCarlo, *Massachusetts Institute of Technology*
 - Viktor Jirsa, *Human Brain Project*
- **Topic 1c - Navigating the Intersection of AI and Neuroscience**
 - James McClelland, *Stanford University*

Some Context / Framing

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- **Cognitive Science is an equally important player:**
 - one of the first discoverers of the backpropagation learning algorithm was a cognitive psychologist:

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- **Computational modeling in cognitive and brain science:**
 - primary goal is to create computational models that emulate human brain function and cognition

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- **Computational modeling in cognitive and brain science:**
 - primary goal is to create computational models that emulate human brain function and cognition
 - success will put such work in the cross-hairs of regulatory concern