

# Session 1:

## The Bidirectionality of Neuroscience and AI

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- **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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**David Rumelhart**

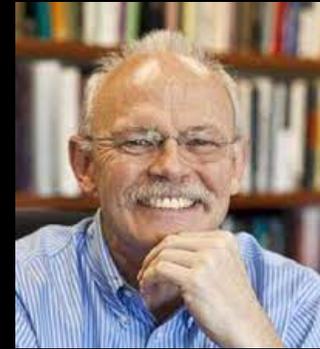
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- **Computational modeling in cognitive and brain science:**
  - primary goal is to create computational models that emulate human brain function and cognition

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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