## Askesis: Introduction

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- Audience neuroscientists at this point
- What's accepted/known vs. what I'm doing
- Where is this coming from applying modern machine learning techniques
- Terminology is new
- We propose novel capabilities that emerge from known connections and learning mechanisms. These novel capabilities are plausible candidates for the function of the cerebellum. The emergence of the capabilities is in keeping with well-understood machine learning research.
- Point out where divergence happens
- Spell out relationship between neuroscience and machine learning aspects of this

## 1 Learning

As a brief aside to anyone not versed in machine learning or neuroscience, "learning" is a term that describes changing the structure or parameters of a system in order to make that system better achieve some goal or perform some purpose correctly. The best understood mechanism for learning in the brain is changing the strength of synapses, the gaps between two neurons, usually by changing the number of receptors that respond to neurotransmitters.

unsure whether we actually want this paragraph - does it make us sound like a noob?