NeuroAI 2024: Center for Cognitive Neuroscience Workshop on Neuroscience and Artificial Intelligence

October 21 - October 22, 2024

Organizers:

Michael Casey, Emily Finn, Jeremy Manning, Caroline Robertson, Dan Rockmore, Arjen Stolk, Soroush Vosoughi, Tor Wager

Venue:

Hanover Inn, Grand Ballroom, 2 East Wheelock St, Hanover, NH 03755

Monday, October 21, 2024

8:00 a.m. - 11:30 a.m.		**Session 1**
8:00 a.m.		Breakfast
8:30 a.m.	**Wager**	Welcome / Opening remarks
8:40 - 9:20 a.m.	**Churchland**	*From spikes to factors: understanding large-scale neural computations*
9:20 - 10:00 a.m.	**Sussillo**	*Brain-wide population dynamics of decision-making under uncertainty*
10:00 - 10:40 a.m.	**McDermott**	*New models of human hearing via machine learning*
10:40 - 11:00 a.m.		Coffee break
11:00 - 11:30 a.m.	**Chair – Manning**	General discussion
11:30 a.m. - 12:30 p.m.		Lunch
12:30 - 3:20 p.m.		**Session 2**
12:30 - 1:10 p.m.	**Guo**	*Modeling naturalistic face processing in humans with deep convolutional neural networks*
1:10 - 1:50 p.m.	**Murty**	*Executable NeuroAI models for human cognitive neuroscience*

1:50 - 2:30 p.m.	**Yamins**	*Counterfactual world modeling as a unifying principle for visual cognition*
2:30 - 2:50 p.m.		Coffee break
2:50 - 3:20 p.m.	**Chairs – Abdi & Krishnan**	General discussion
3:20 - 5:10 p.m.		**Session 3**
3:20 - 4:00 p.m.	**Yan**	*From black box to insight: Explainable neural networks for brain data predictions*
4:00-4:40 p.m.	**Jin**	*Multi-modal video understanding*
4:40 - 5:10 p.m.	**Chair - Vosoughi**	General discussion / closing remarks

Tuesday, October 22, 2024

8:30 a.m. - 1:00 p.m.		**Session 4**
8:30 a.m.		Breakfast
9:05 - 9:10 a.m.	**Wager**	Welcome/Opening remarks
9:10 - 9:50 a.m.	**Isik**	*Seeing social interactions*
9:50 - 10:30 a.m.	**Jones**	*Human-like learning in nonstationary environments*
10:30 - 11:10 a.m.	**O'Reilly**	*AI won't think for itself until it wants to*
11:10 a.m. - 12:00 p.m.	**Chair – Robertson**	General discussion / Final remarks
12:00 - 1:00 p.m.		Lunch
1:00 p.m.		Meeting adjourned, departure