AI DEBATE 2
MOVING AI FORWARD: AN INTERDISCIPLINARY APPROACH
PRE-READINGS

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ABSTRACT

Pre-readings recommended to the audience before *AI DEBATE 2 - Moving AI Forward: An Interdisciplinary Approach*. **Confirmed speakers**: *Ryan Calo, Yejin Choi, Daniel Kahneman, Celeste Kidd, Christof Koch, Luis Lamb, Fei-Fei Li, Adam Marblestone, Margaret Mitchell, Robert Osazuwa Ness, Judea Pearl, Francesca Rossi, Ken Stanley, Rich Sutton, Doris Tsao, Barbara Tversky.* **Moderator and co-organizer**: **Gary Marcus**. Hashtag : *#AIDebate2*.

WebPage: https://montrealartificialintelligence.com/aidebate2/.

RSVP for the live streaming event at https://aidebate.eventbrite.ca.

1 Ryan Calo's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Artificial Intelligence Policy: Not Just A Matter of Principles*
Artificial Intelligence Policy: A Primer and Roadmap, Ryan Calo, 2017: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3015350
Homepage: https://twitter.com/rcalo

2 Yejin Choi's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Commonsense AI: Cracking the Longstanding Challenge in AI*
Keynote at the Stanford Human-Centered AI (HAI) Conference on Triangulating Intelligence: Melding Neuroscience, Psychology, and AI: https://www.youtube.com/watch?v=l9ZaKOIzsVY?t=1680
Homepage: https://homes.cs.washington.edu/~yejin/

3 Daniel Kahneman's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *How People Think about the Counterfactual and the Normal*

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4   Celeste Kidd's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Profound impacts of AI (and its biases) on human beliefs*
The Psychology and Neuroscience of Curiosity, Kidd and Hayden, Neuron, 2015: `http://www.celestekidd.com/papers/KiddHayden2015.pdf`.
Homepage: `www.kiddlab.com`

5   Christof Koch's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Don't look (anymore) at neuroscience for help with AI*
Homepage: `https://christofkoch.com/`

6   Luis Lamb's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Neurosymbolic AI: The 3rd Wave*
Neurosymbolic AI: The 3rd Wave, Artur d'Avila Garcez and Luis Lamb, 2020: `https://arxiv.org/abs/2012.05876`.
Homepage: `http://www.inf.ufrgs.br/~lamb`

7   Fei-Fei Li's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *In search of the next AI North Star: a tale of two kittens*

8   Adam Marblestone's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Leveraging neuro-technology for AI*
Toward an Integration of Deep Learning and Neuroscience, Marblestone et al., 2016: `https://www.frontiersin.org/articles/10.3389/fncom.2016.00094/full`.
Homepage: `www.adammarblestone.org`

9   Gary Marcus's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *The Next Decade in AI*
The Next Decade in AI: Four Steps Towards Robust Artificial Intelligence, Gary Marcus, 2020: `https://arxiv.org/abs/2002.06177v3`.
Homepage: `http://rebooting.ai/`

10   Robert Ness's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Causal Reasoning with (Deep) Probabilistic Programming*
Integrating Markov processes with structural causal modeling enables counterfactual inference in complex systems, Ness et al., 2019: `https://papers.nips.cc/paper/2019/file/2d44e06a7038f2dd98f0f54c4be35e22-Paper.pdf`.
Homepage: `https://www.altdeep.ai`

11   Judea Pearl's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *The Domestication of Causal Reasoning: Cultural and Methodological Implications*
The Seven Tools of Causal Inference, Judea Pearl, 2016: `https://ucla.in/2HI2yyx`.
Radical Empiricism and Machine Learning Research, Judea Pearl, 2020: `https://ucla.in/32YKcWy`.
Data versus Science: Contesting the Soul of Data-Science, Judea Pearl, 2020: `https://ucla.in/3iEDRVo`.
Homepage: `http://bayes.cs.ucla.edu/jp_home.html`

12   Francesca Rossi's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Thinking Fast and Slow in AI: Towards more general and trustworthy AI*
Thinking fast and slow in AI (AAAI blue-sky ideas track, 2021), Booch et al., 2020: `https://arxiv.org/abs/2010.06002`.

13   Kenneth Stanley's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Open-Endedness, Evolution, and AI*
Open-endedness: The last grand challenge you've never heard of, Stanley et al., 2017: `https://www.oreilly.com/radar/open-endedness-the-last-grand-challenge-youve-never-heard-of/`.

14   Richard Sutton's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Reinforcement Learning is the Computational Theory of Intelligence*
The Bitter Lesson, Rich Sutton, 2019: `http://www.incompleteideas.net/IncIdeas/BitterLesson.html`.
Homepage: `http://richsutton.com`

15   Doris Tsao's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *How the brain builds a model of the world: insights from neuroscience*
The macaque face patch system: a turtle's underbelly for the brain, Janis K. Hesse and Doris Y. Tsao, 2020: `https://www.nature.com/articles/s41583-020-00393-w?proof=t`.
Homepage: `https://www.tsaolab.caltech.edu/`

16   Barbara Tversky's Pre-Readings

Preliminary Remark Title at AI DEBATE 2: *Thinking with the Body and the World*