Bradly C. Stadie
Email: bstadie@vectorinstitute.ai

Education

University of Chicago — Chicago, IL
BA in Mathematics (Honors) — *September 2010 - June 2014*

University of California, Berkeley — Berkeley, CA
Ph.D in Statistics — *August 2014 - August 2018*

Employment

Vector Institute — Toronto, Canada
Postdoctoral Scholar — *August 2018 - Present*

- Postdoctoral researcher at the Vector Institute at the University of Toronto
- Advised by Jimmy Ba

Open AI — San Francisco, USA
Research Scientist — *March 2016 - November 2017*

- Full-time research scientist at Open AI
- Advised by Ilya Sutskever

AI Expert at Y Combinator — San Francisco, USA
Part-time Partner — *January 2017 - January 2018*

- Advised Y Combinator on the latest trends in AI
- Advised over 50 startups on AI and ML problems

Young Scholars Program/SESAME — Chicago, USA
Counselor — *June 2011 - May 2013*

- Taught mathematics to Chicagoland high school students and CPS teachers
- Full-time during summers. Every Saturday and Sunday during school year
- Was head counselor from June 2012 - May 2013

Publications

1. *Incentivizing Exploration in Reinforcement Learning with Deep Predictive Models*
Bradly C. Stadie, Sergey Levine, Pieter Abbeel
In Neural Information Processing Systems (NIPS) Deep RL Workshop, Montreal, Canada, December 2015
arXiv: https://arxiv.org/pdf/1507.00814.pdf

2. *Third-Person Imitation Learning*
Bradly C. Stadie, Pieter Abbeel, Ilya Sutskever
In the proceedings of the International Conference on Learning Representations (ICLR), Toulon, France, April 2017
arXiv: https://arxiv.org/pdf/1703.01703.pdf

3. *One-Shot Imitation Learning*
Yan (Rocky) Duan, Marcin Andrychowicz, Bradly C. Stadie, Jonathan Ho, Jonas Schneider, Ilya Sutskever, Pieter Abbeel, Wojciech Zaremba
In Neural Information Processing Systems (NIPS), Long Beach, California, December 2017
arXiv: https://arxiv.org/pdf/1703.07326.pdf

4. *Simulating the Stochastic Dynamics and Cascade Failure of Power Networks*
Charles Matthews, Bradly C. Stadie, Jonathan Weare, Mihai Anitescu, Christopher Demarco
Submitted to IEEE Transactions on Power Systems
arXiv: https://arxiv.org/pdf/1806.02420.pdf

5. *Some Considerations on Learning to Explore via Meta-Reinforcement Learning*
Bradly C. Stadie, Ge Yang, Rein Houthooft, Xi Chen, Yan Duan, Yuhuai Wu, Pieter Abbeel, Ilya Sutskever
In Neural Information Processing Systems (NIPS), Montreal, Canada, December 2018
arXiv: https://arxiv.org/pdf/1803.01118.pdf

6. *Evolved Policy Gradients*
Rein Houthooft, Richard Y. Chen, Phillip Isola, Bradly C. Stadie, Filip Wolski, Jonathan Ho, Pieter Abbeel
In Neural Information Processing Systems (NIPS) [Spotlight], Montreal, Canada, December 2018
arXiv: https://arxiv.org/pdf/1802.04821.pdf

7. *Transfer Learning for Estimating Causal Effects Using Neural Networks.*
Bradly C. Stadie, Soeren R. Kuenzel, Nikita Vemuri, Varsha Ramakrishnan, Jasjeet S. Sekhon, Pieter Abbeel
INFORMS Annual Meeting ML and causal inference workshop
arXiv: https://arxiv.org/pdf/1808.07804.pdf

8. *Sampling Aware Reinforcement Learning*
Lunjun Zhang, Bradly C. Stadie, Jimmy Ba
Preprint. Available at: https://github.com/bstadie/All-Bradly-Stadie-Papers/

9. *One-Shot Pruning of Recurrent Neural Networks by Jacobian Spectrum Evaluation*
Matthew Zhang, Bradly C. Stadie
Submitted to ICLR 2020
Available at: https://arxiv.org/pdf/1912.00120.pdf

10. *Learning to Learn from Flawed, Failed, and Figurative Demonstrations*
Ge Yang, Bradly C. Stadie, Roberto Calandra, Pieter Abbeel, Sergey Levine, Chelsea Finn
In Neural Information Processing Systems (NIPS) Deep RL workshop [Spotlight], Montreal, Canada, December 2018
Preprint. Available at: https://github.com/bstadie/All-Bradly-Stadie-Papers/

11. *One-Demonstration Imitation Learning*
Bradly C. Stadie, Siyan Zhao, Qiqi Xu, Bonnie Li, Lunjun Zhang
Submitted to ICLR 2020
Preprint. Available at: https://github.com/bstadie/All-Bradly-Stadie-Papers/

Invited Talks

- **Northwestern University Han Liu Group invited speaker (October 2019)**: Learning reward functions.
- **INFORMS panel on ML in causal inference (October 2019):** Transfer learning causal effects.
- **University of Illinois, Urbana Champaign (October 2019)**: Learning reward functions.
- **Toyota Technological Institute, Chicago (May 2019)**: Learning from imperfect data.
- **University of Wisconsin, Madison (April 2019)**: Learning from imperfect data.
- **Purdue University (April 2019)**: Learning from imperfect data.
- **University of Montreal (February 2018)**: The relationship between sampling and meta learning.
- **University of Toronto (February 2018)**: The relationship between sampling and meta learning.
- **Harvard University 2017 Big Data Conference (August 2017)**: Frontiers of meta learning.
- **Open AI (March 2016)**: Exploration in deep reinforcement learning.

Teaching

- **Statistics 133: Concepts in Computing with Data**. Graduate Student Instructor. *Jan - May 2015*
- **Statistics 088: Introduction to Data Science**. Graduate Student Instructor. *Jan - May 2016*