Mikael Henaff

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Education:	**Ph.D in Computer Science**, September 2018
	Courant Institute, New York University
	Advisor: Yann LeCun
	Master of Science in Mathematics, September 2011
	Courant Institute, New York University
	Bachelor of Science in Mathematics, May 2008
	University of Texas, Austin

Work Experience:

Postdoctoral Researcher   Fall 2018-Present
Microsoft Research, New York City

Teaching Assistant (Deep Learning)   Spring 2018
New York University

Research Intern   Summer 2014, 2015, 2016
Facebook AI Research (mentors: Jason Weston, Arthur Szlam, Yann LeCun)

Scientific Programmer   Summer 2011 to Summer 2013
Center for Health Informatics and Bioinformatics, NYU Langone Medical Center

Mathematics Tutor   September 2006 to May 2008
University of Texas Learning Center

Publications:

- K. Brantley, W. Sun, **M. Henaff**. "Disagreement-Regularized Imitation Learning," *International Conference on Learning Representations (ICLR), 2020. (spotlight)*

- **M. Henaff**. "Explicit Explore-Exploit Algorithms in Continuous State Spaces," *Neural Information Processing Systems (NeurIPS), 2019.*

- **M. Henaff***, A. Canziani*, Y. LeCun. "Model-Predictive Policy Learning with Uncertainty Regularization for Driving in Dense Traffic," *International Conference on Learning Representations (ICLR), 2019.* (*equal contribution)

- **M. Henaff**, J. Weston, A. Szlam, A. Bordes, Y. LeCun. "Tracking the World State with Recurrent Entity Networks," *International Conference on Learning Representations (ICLR), 2017.*

- **M. Henaff**, A. Szlam, Y. LeCun. "Recurrent Orthogonal Networks and Long-Memory Tasks," *International Conference on Machine Learning (ICML), 2016.*

- A. Statnikov, S. Ma, **M. Henaff**, N. Lytkin, E. Efstathiadis, E. Peskin, C. Aliferis. "Ultra-Scalable and Efficient Methods for Hybrid Observational and Experimental Local Causal Pathway Discovery, " *Journal of Machine Learning Research (JMLR), 2016.*

- A. Choromanska, **M. Henaff**, M. Mathieu, G. Ben Arous, Y. LeCun. "The Loss Surfaces of Multilayer Networks," *International Conference on Artificial Intelligence and Statistics (AISTATS), 2015.*

- M. Mathieu, **M. Henaff**, Y. LeCun. "Fast Training of Convolutional Networks through FFTs," *International Conference on Learning Representations (ICLR), 2014.*

- B. Ray, **M. Henaff**, S. Ma, E. Efstathiadis, E. Peskin, M. Picone, T. Poli, C. Aliferis, A. Statnikov. "Information content and analysis methods for multi-modal high-throughput biomedical data, ", *Nature Scientific Reports*, 2014.
- A. Statnikov, A. Alekseyenko, **M. Henaff**, Z. Li, M. Blaser, C. Aliferis. "Microbiomic Signatures of Psoriasis: Feasibility and Methodology Comparison," *Nature Scientific Reports*, 2013.
- A. Statnikov, **M. Henaff**, V. Narendra, K. Konganti, Z. Li, L. Yang, Z. Pei, M. Blaser, C. Aliferis, A. Alekseyenko. "A Comprehensive Evaluation of Multicategory Classification Methods for Microbiomic Data," *Microbiome*, 2013.
- A. Statnikov, **M. Henaff**, N. Lytkin, C. Aliferis. "New Methods for Separating Causes from Effects in Genomics Data," *BMC Genomics*, 2012.
- **M. Henaff**, K. Jarrett, K. Kavukcuoglu, Y. LeCun. "Unsupervised Learning of Sparse Features for Scalable Audio Classification," *International Society for Music Information Retrieval Conference (ISMIR), 2011.*

Invited Talks:

- Microsoft Research Redmond, August 2018. "Learning Predictive Models of the Environment Under Uncertainty"
- UMass Amherst, March 2017. "Tracking the World State with Recurrent Entity Networks"
- Cornell Tech, March 2017. "Tracking the World State with Recurrent Entity Networks"
- Columbia University, December 2011. "Unsupervised Learning of Sparse Features for Scalable Audio Classification"
- NYU Music and Audio Research Lab, October 2011. "Unsupervised Learning of Sparse Features for Scalable Audio Classification"

Honors and Awards:

- MacCracken Graduate Fellowship, New York University, 2013-2018.
- Best Student Paper Award, ISMIR 2011.

Academic Service:

- Reviewer for ICLR (2017, 2018, 2019, 2020), ICML (2017, 2018, 2019), NeurIPS (2016, 2017, 2018, 2019), AISTATS (2016), JMLR (2015), ISMIR (2012, 2014).

Computer Skills:

- Languages: Python/PyTorch, Lua/LuaTorch, MATLAB, R, Bash.
- Software: Git, LaTeX, PBS, Slurm.

Other Interests: Electronic music production, contemporary art, rock climbing.

Languages: Fluent in English and French.