Eric Nalisnick

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Education

Ph.D. Computer Science	University of California, Irvine	2013-2018
M.S. Computer Science	Lehigh University	2012-2013
B.S. Computer Science & English Literature	Lehigh University	2008-2012

Employment

Postdoctoral Research Associate — University of Cambridge
Supervisors: Zoubin Ghahramani, José Miguel Hernández-Lobato — Fall 2018 to Present

Research Scientist — DeepMind
February 2019 to Present

Research Scientist Intern — DeepMind
Supervisor: Balaji Lakshminarayanan — Summer 2018

Graduate Student Researcher — University of California, Irvine
Supervisor: Padhraic Smyth — Fall 2013 to Spring 2018

Applied Scientist Intern — Amazon
Supervisors: Vijai Mohan, Eiman Elnahrawy — Fall 2016

Research Intern — Twitter
Supervisor: Hugo Larochelle — Summer 2016

Research Intern — Microsoft
Supervisors: Rich Caruana, Nick Craswell — Summer 2015

Research Scientist Intern — Amazon
Supervisors: Vijai Mohan, Rahul Bhagat — Summer 2014

Publications

Conference Articles

1. **E. Nalisnick**, J. M. Hernández-Lobato, and P. Smyth. Dropout as a Structured Shrinkage Prior. In *Proceedings of the 36th International Conference on Machine Learning* (ICML), 2019.
2. **E. Nalisnick***, A. Matsukawa*, Y. W. Teh, D. Gorur, and B. Lakshminarayanan. Hybrid Models with Deep and Invertible Features. In *Proceedings of the 36th International Conference on Machine Learning* (ICML), 2019.

3. **E. Nalisnick**, A. Matsukawa, Y. W. Teh, D. Gorur, and B. Lakshminarayanan. Do Deep Generative Models Know What They Don't Know? In *Proceedings of the 7th International Conference on Learning Representations* (ICLR), 2019.
4. D. Ji, **E. Nalisnick**, Y. Qian, R. Scheuermann, and P. Smyth. Bayesian Trees for Automated Cytometry Data Analysis. In *Proceedings of Machine Learning for Healthcare* (MLHC), 2018.
5. **E. Nalisnick** and P. Smyth. Learning Priors for Invariance. In *Proceedings of the 21st International Conference on Artificial Intelligence and Statistics* (AISTATS), 2018.
6. **E. Nalisnick** and P. Smyth. Learning Approximately Objective Priors. In *Proceedings of the 33rd Conference on Uncertainty in Artificial Intelligence* (UAI), 2017.
7. **E. Nalisnick** and P. Smyth. Stick-Breaking Variational Autoencoders. In *Proceedings of the 5th International Conference on Learning Representations* (ICLR), 2017.
8. **E. Nalisnick**, B. Mitra, N. Craswell, and R. Caruana. Improving Document Ranking with Dual Word Embeddings. In *Proceedings of the 25th World Wide Web Conference* (WWW), 2016.
9. **E. Nalisnick** and H. Baird. Character-to-Character Sentiment Analysis in Shakespeare's Plays. In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics* (ACL), 2013.
10. **E. Nalisnick** and H. Baird. Extracting Sentiment Networks from Shakespeare's Plays. In *Proceedings of the 12th International Conference on Document Analysis and Recognition* (ICDAR), 2013.

THESES

1. **E. Nalisnick**. On Priors for Bayesian Neural Networks. *Doctoral Dissertation*, University of California, Irvine, 2018.
2. **E. Nalisnick**. Automatic Methods for Tracking Sentiment Dynamics in Plays. *Master's Thesis*, Lehigh University, 2013.

Teaching

1. Teaching Assistant | University of California, Irvine 2018
   CS 175: Projects in Artificial Intelligence
2. Instructor | University of California, Irvine 2017
   CS 299: Individual Study (Topics in Approximate Bayesian Inference)
3. Teaching Assistant | University of California, Irvine 2017
   CS 274A: Probabilistic Learning
4. Instructor | UCI Data Science Initiative 2016 to 2017
   Advanced Predictive Modeling with Python
5. Instructor | UCI Data Science Initiative 2015 to 2017
   Predictive Modeling with Python

Talks

1. Evaluating Deep Generative Models on Out-of-Distribution Inputs, Oxford Stats. Seminar 2019
2. Do Deep Generative Models Know What They Don't Know?, CamAIML (MSR Cambridge) 2019
3. Machine Learning with Objective Priors, Cambridge Division F Conference 2019
4. Do Deep Generative Models Know What They Don't Know?, Cambridge LTL Seminar 2019
5. Structured Shrinkage Priors for Neural Networks, Imperial College Statistics Seminar 2018
6. Deep Learning: A Synthesis from Probabilistic Foundations, UCI Statistics Seminar 2018
7. Approximate Inference for Frequentist Uncertainty Estimation, SoCal ML Symposium 2017
8. The Amortized Bootstrap, ICML Workshop on Implicit Models 2017
9. Deep Generative Models with Stick-Breaking Priors, UCI AI/ML Seminar 2017
10. Alternative Priors for Deep Generative Models, OpenAI 2017
11. Nonparametric Deep Generative Models, ICML Workshop on Data-Efficient ML 2016

Professional Service

Journal Reviewing

Machine Learning Research	2018
Machine Learning	2017
Data Mining and Knowledge Discovery	2017

Conference Reviewing

Neural Information Processing Systems (NeurIPS)	2016, 2017*, 2018
International Conference on Learning Representations (ICLR)	2018, 2019
International Conference on Machine Learning (ICML)	2018, 2019*
Artificial Intelligence and Statistics (AIStats)	2019
Uncertainty in Artificial Intelligence (UAI)	2019
International Joint Conference on Artificial Intelligence (IJCAI)	2019

** top reviewer award*