

Joseph L. Marino

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Education	California Institute of Technology Ph.D. Candidate in Computation and Neural Systems	2014 - Present
	University of Minnesota, Twin Cities B.S. in Physics, Minor in Computer Science	2010 - 2014 High Distinction
Recent Work Experience	Disney Research Pittsburgh, PA	R&D Lab Associate (Intern) March 2017 - June 2017
Publications	Improving Sequential Latent Variable Models with Autoregressive Flows Joseph Marino , Lei Chen, Jiawei He, Stephan Mandt <i>Advances in Approximate Bayesian Inference (AABI)</i>	2019
	Predictive Coding, Variational Autoencoders, and Biological Connections Joseph Marino <i>NeurIPS Workshop on Real Neurons & Hidden Units</i>	2019
	On the Design of Variational RL Algorithms Joseph Marino , Alexandre Piche, Yisong Yue <i>NeurIPS Deep Reinforcement Learning Workshop</i>	2019
	An Inference Perspective on Model-Based Reinforcement Learning Joseph Marino , Yisong Yue <i>ICML Workshop on Generative Modeling & Model-Based Reasoning</i>	2019
	VAEs with Jointly Optimized Latent Dependency Structure Jiawei He, Yu Gong, Joseph Marino , Greg Mori, Andreas Lehrmann <i>International Conference on Learning Representations (ICLR)</i>	2019
	A General Method for Amortizing Variational Filtering Joseph Marino , Milan Cvitkovic, Yisong Yue <i>Neural Information Processing Systems (NeurIPS)</i>	2018
	Probabilistic Video Generation using Holistic Attribute Control Jiawei He, Andreas Lehrmann, Joseph Marino , Greg Mori, Leonid Sigal <i>European Conference on Computer Vision (ECCV)</i>	2018
	Iterative Amortized Inference Joseph Marino , Yisong Yue, Stephan Mandt <i>International Conference on Machine Learning (ICML)</i>	2018
Teaching	CNS 187 - Neural Computation (Teaching Assistant, Guest Lecturer) <i>Lectures: Convolutional Neural Networks, Biological Inspiration</i>	2015 – 2016
	CS 155 - Machine Learning & Data Mining (Guest Lecturer) <i>Lectures: Intro. to Deep Learning, CNNs & RNNs, Deep Generative Models</i>	2017 – 2020
	Theory of Biological Computation (Guest Lecturer) <i>Lectures: Predictive Coding</i>	2018
	CS 159 - Special Topics in Machine Learning (Teaching Assistant, Lecturer) <i>Lectures: Intro. to Deep Generative Models, Latent Variable Models, Amortized Optimization</i>	2019 – 2020

**Relevant
Coursework**

Machine Learning: Introduction to Data Mining, Mathematical Modeling, Learning Systems, Neural Computation, Machine Learning and Data Mining, Advanced Topics in Machine Learning, CIFAR Deep Learning/Reinforcement Learning Summer School 2016 & 2017

Neuroscience Introduction to Neuroscience, Introduction to Computation and Neural Systems, Brain Circuits, Topics in Systems Neuroscience, Introduction to Vision, Principles of Neuroscience, Theory of Biological Computation

Reviewing

NeurIPS, ICML, CVPR , ICCV , ECCV

Awards	NSF GRFP Honorable Mention	2016
	Kunzel Fellowship, Caltech	2014 - 2017
	Dean's List, University of Minnesota	2010 - 2014
	Summer Undergraduate Research Fellowship, Caltech	2013
	Eagle Scout Award, Boy Scouts of America	2010