Joseph L. Marino

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Education		
	California Institute of Technology (Caltech)	2014 – 2021
	Ph.D. in Computation & Neural Systems	
	Pasadena, CA	
	University of Minnesota, Twin Cities	2010 – 2014
	B.S. in Physics, Minor in Computer Science	High Distinction
	Minneapolis, MN	

Work Experience

DeepMind — Research Scientist
London, UK — October 2021 – Present

Disney Research — R&D Lab Associate (Intern)
Pittsburgh, PA — March 2017 – June 2017

Preprints

Insights from Generative Modeling for Neural Video Compression   2021
Ruihan Yang, Yibo Yang, **Joseph Marino**, Stephan Mandt
arXiv: 2107.13136

Beyond Target Networks: Improving Deep Q-Learning with FR   2021
Alexandre Piché, **Joseph Marino**, Gian Maria Marconi, Chris Pal, Mohammad Emtiyaz Khan
arXiv: 2106.02613

Conference Publications

Iterative Amortized Policy Optimization   2021
Joseph Marino, Alexandre Piché, Alessandro Davide Ialongo, Yisong Yue
Neural Information Processing Systems (NeurIPS)

Hierarchical Autoregressive Modeling for Neural Video Compression   2021
Ruihan Yang, Yibo Yang, **Joseph Marino**, Stephan Mandt
International Conference on Learning Representations (ICLR)

VAEs with Jointly Optimized Latent Dependency Structure   2019
Jiawei He, Yu Gong, **Joseph Marino**, Greg Mori, Andreas Lehrmann
International Conference on Learning Representations (ICLR)

A General Method for Amortizing Variational Filtering   2018
Joseph Marino, Milan Cvitkovic, Yisong Yue
Neural Information Processing Systems (NeurIPS)

Probabilistic Video Generation using Holistic Attribute Control   2018
Jiawei He, Andreas Lehrmann, **Joseph Marino**, Greg Mori, Leonid Sigal
European Conference on Computer Vision (ECCV)

Iterative Amortized Inference   2018
Joseph Marino, Yisong Yue, Stephan Mandt
International Conference on Machine Learning (ICML)

Journal Publications

Predictive Coding, Variational Autoencoders, and Biological Connections   2021
Joseph Marino
Neural Computation

	Improving Sequential Latent Variable Models with Autoregressive Flows **Joseph Marino**, Lei Chen, Jiawei He, Stephan Mandt *Machine Learning*	2021
Selected Workshop Publications	**Scale Space Flow with Autoregressive Priors** Ruihan Yang, Yibo Yang, **Joseph Marino**, Stephan Mandt *ICLR 2021 Workshop on Neural Compression*	2021
	Sequential Autoregressive Flow-Based Policies Alex Guerra, **Joseph Marino** *ICML INNF Workshop*	2020
	On the Design of Variational RL Algorithms **Joseph Marino**, Alexandre Piché, Yisong Yue *NeurIPS Deep Reinforcement Learning Workshop*	2019
	An Inference Perspective on Model-Based Reinforcement Learning **Joseph Marino**, Yisong Yue *ICML Workshop on Generative Modeling & Model-Based Reasoning*	2019
Thesis	**Learned Feedback & Feedfoward Perception & Control** **Joseph Marino** *Ph.D. Thesis*	2021
Teaching	CNS 187 - Neural Computation (Teaching Assistant, Guest Lecturer) *Lectures: Convolutional Neural Networks, Biological Inspiration*	2015 – 2016
	CS 155 - Machine Learning & Data Mining (Guest Lecturer) *Lectures: Intro. to Deep Learning, CNNs & RNNs, Deep Generative Models*	2017 – 2020
	Theory of Biological Computation (Guest Lecturer) *Lectures: Predictive Coding*	2018
	CS 159 - Special Topics in Machine Learning (Teaching Assistant, Lecturer) *Lectures: Intro. to Deep Generative Models, Latent Variable Models, Amortized Optimization, Model-Based RL*	2019 – 2021
	CS 259 - [@ UC Irvine] Deep Generative Models (Guest Lecturer) *Lectures: Deep Sequential Latent Variable Models*	2019 – 2020

Reviewing

Conferences
- ICLR: 2021, 2022
- NeurIPS: 2019, 2020, 2021
- ICML: 2019, 2020, 2021
- CVPR: 2017, 2018, 2019
- ECCV: 2018
- ICCV: 2017

Journals
- Foundations & Trends in Machine Learning: 2021

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