

Education	California Institute of Technology (Caltech) Ph.D. in Computation & Neural Systems Pasadena, CA	2014 – 2021
	University of Minnesota, Twin Cities B.S. in Physics, Minor in Computer Science Minneapolis, MN	2010 – 2014 High Distinction
Work Experience	DeepMind London, UK	Research Scientist October 2021 – Present
	Disney Research Pittsburgh, PA	R&D Lab Associate (Intern) March 2017 – June 2017
Preprints	Insights from Generative Modeling for Neural Video Compression Ruihan Yang, Yibo Yang, Joseph Marino , Stephan Mandt <i>arXiv: 2107.13136</i>	2021
	Beyond Target Networks: Improving Deep Q-Learning with FR Alexandre Piché, Joseph Marino , Gian Maria Marconi, Chris Pal, Mohammad Emtiyaz Khan <i>arXiv: 2106.02613</i>	2021
Conference Publications	Iterative Amortized Policy Optimization Joseph Marino , Alexandre Piché, Alessandro Davide Ialongo, Yisong Yue <i>Neural Information Processing Systems (NeurIPS)</i>	2021
	Hierarchical Autoregressive Modeling for Neural Video Compression Ruihan Yang, Yibo Yang, Joseph Marino , Stephan Mandt <i>International Conference on Learning Representations (ICLR)</i>	2021
	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
Journal Publications	Predictive Coding, Variational Autoencoders, and Biological Connections Joseph Marino <i>Neural Computation</i>	2021

	Improving Sequential Latent Variable Models with Autoregressive Flows Joseph Marino , Lei Chen, Jiawei He, Stephan Mandt <i>Machine Learning</i>	2021
Selected Workshop Publications	Scale Space Flow with Autoregressive Priors Ruihan Yang, Yibo Yang, Joseph Marino , Stephan Mandt <i>ICLR 2021 Workshop on Neural Compression</i>	2021
	Sequential Autoregressive Flow-Based Policies Alex Guerra, Joseph Marino <i>ICML INNMF Workshop</i>	2020
	On the Design of Variational RL Algorithms Joseph Marino , Alexandre Piché, 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
Thesis	Learned Feedback & Feedforward Perception & Control Joseph Marino <i>Ph.D. Thesis</i>	2021
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, Model-Based RL</i>	2019 – 2021
	CS 259 - [@ UC Irvine] Deep Generative Models (Guest Lecturer) <i>Lectures: Deep Sequential Latent Variable Models</i>	2019 – 2020
Reviewing	Conferences <ul style="list-style-type: none"> • ICLR: 2021, 2022 • NeurIPS: 2019, 2020, 2021 • ICML: 2019, 2020, 2021 • CVPR: 2017, 2018, 2019 • ECCV: 2018 • ICCV: 2017 Journals <ul style="list-style-type: none"> • Foundations & Trends in Machine Learning: 2021 	
Awards	NSF GRFP Honorable Mention Kunzel Fellowship, Caltech Dean's List, University of Minnesota Summer Undergraduate Research Fellowship, Caltech Eagle Scout Award, Boy Scouts of America	2016 2014 – 2017 2010 – 2014 2013 2010