Manfred Opper

List of Publications by Year
in descending order

21 papers	427 citations	1163117 8 h-index	752698 20 g-index
22 all docs	22 docs citations	22 times ranked	393 citing authors

#	Article	IF	Citations
1	Variational Bayesian Inference for Nonlinear Hawkes Process with Gaussian Process Self-Effects. Entropy, 2022, 24, 356.	2.2	4
2	GP-ETAS: semiparametric Bayesian inference for the spatio-temporal epidemic type aftershock sequence model. Statistics and Computing, 2022, 32, 1.	1.5	7
3	Exact solution to the random sequential dynamics of a message passing algorithm. Physical Review E, 2021, 103, L030101.	2.1	1
4	Flexible and Efficient Inference with Particles for the Variational Gaussian Approximation. Entropy, 2021, 23, 990.	2.2	3
5	Interacting Particle Solutions of Fokkerâ€“Planck Equations Through Gradientâ€“Logâ€“Density Estimation. Entropy, 2020, 22, 802.	2.2	7
6	A mathematical model of local and global attention in natural scene viewing. PLoS Computational Biology, 2020, 16, e1007880.	3.2	10
7	Memory-free dynamics for the Thouless-Anderson-Palmer equations of Ising models with arbitrary rotation-invariant ensembles of random coupling matrices. Physical Review E, 2019, 99, 062140.	2.1	13
8	Variational Inference for Stochastic Differential Equations. Annalen Der Physik, 2019, 531, 1800233.	2.4	12
9	Approximate Bayes learning of stochastic differential equations. Physical Review E, 2018, 98, 022109.	2.1	19
10	Optimal Decoding of Dynamic Stimuli by Heterogeneous Populations of Spiking Neurons: A Closed-Form Approximation. Neural Computation, 2018, 30, 2056-2112.	2.2	2
11	Optimal encoding and decoding for point process observations: An approximate closed-form filter. , 2016, , .		0
12	Variational estimation of the drift for stochastic differential equations from the empirical density. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 083404.	2.3	12
13	Visualizing the effects of a changing distance on data using continuous embeddings. Computational Statistics and Data Analysis, 2016, 104, 51-65.	1.2	1
14	Expectation propagation for continuous time stochastic processes. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 494002.	2.1	8
15	Variational mean-field algorithm for efficient inference in large systems of stochastic differential equations. Physical Review E, 2015, 91, 012148.	2.1	15
16	Dynamic state estimation based on Poisson spike trainsâ€"towards a theory of optimal encoding. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P03009.	2.3	4
17	Optimal control as a graphical model inference problem. Machine Learning, 2012, 87, 159-182.	5.4	165
18	Variational Markov chain Monte Carlo for Bayesian smoothing of non-linear diffusions. Computational Statistics, 2012, 27, 149-176.	1.5	6

#	Article	IF	Citations
19	Estimating parameters in stochastic systems: A variational Bayesian approach. Physica D: Nonlinear Phenomena, 2011, 240, 1877-1900.	2.8	14
20	A Comparison of Variational and Markov Chain Monte Carlo Methods for Inference in Partially Observed Stochastic Dynamic Systems. Journal of Signal Processing Systems, 2010, 61, 51-59.	2.1	5
21	The Variational Gaussian Approximation Revisited. Neural Computation, 2009, 21, 786-792.	2.2	119