



Bayesian Inference: Algorithms and Challenges in Machine Learning

Guest Editor:

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submissions:

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Message from the Guest Editor

We are inviting submissions to a Special Issue on “Bayesian Inference: Algorithms and Challenges in Machine Learning”. We welcome original research, in the form of methodological and/or theoretical studies, as well as state-of-the-art review papers. Application-oriented studies can also fit if the Bayesian treatment of the application depicts sufficient novelty.

Topics of interest include (but are not limited to) the following:

- Approximate inference algorithms: Variational inference, Markov chain Monte Carlo (MCMC)-based inference, etc.
- Bayesian neural networks: Modelling epistemic and/or aleatoric uncertainty, scalability issues, etc.
- Bayesian approaches to fairness, interpretability, and robustness in machine learning.
- Bayesian approaches to transfer learning and related paradigms, e.g., domain adaptation, meta-learning, lifelong learning and multi-task learning.
- Probabilistic graphical models (PGMs): Bayesian networks, undirected graphical models, etc.
- Bayesian optimization: Gaussian processes (GPs), acquisition functions, etc.
- Likelihood-free inference.

We look forward to receiving your contributions.





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Message from the Editor-in-Chief

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