
Propositions accompanying the thesis
Bayesian Variable Selection in High-dimensional Applications

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- (1) “You are never given a dream without also being given the power to make it true.”
(Richard Bach)
- (2) Advances in research technologies over the past few decades have encouraged the proliferation of massive datasets, revolutionizing statistical perspectives on high-dimensionality.
(this thesis)
- (3) Despite rapid developments in stochastic search algorithms, the practicality of Bayesian variable selection methods has continued to pose challenges. (this thesis)
- (4) Ideally suited for high-dimensional “ $p > n$ ” settings with many potential predictors, EMVS succeeds in finding interesting candidate models at a fraction of the time required for stochastic search. (this thesis)
- (5) The speed of the algorithm makes it feasible to identify posterior modes over a whole sequence of mixture distributions with increasing spike variances. (this thesis)
- (6) Bayesian variable selection provides a coherent framework for transmitting structural information by re-distributing probabilities over the model space. (this thesis)
- (7) The pursuit of interdisciplinary research is one of the most inspirational human challenges.
- (8) Intuition is our compass for the darkness of the unknown, our deep sense of right that we must listen to carefully, both in science and life.
- (9) Moments of discovery are the mystical reminders that great things don’t happen without perseverance.
- (10) “One way to pick a future is to believe it is inevitable.” (Richard Bach)