Statement of Research

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Research Area: Bayesian Econometrics, Econometrics.

My research primarily focuses on Bayesian econometrics and simulation-based inference using Markov chain Monte Carlo (MCMC) sampling techniques. I am particularly interested in comparison and development of econometric methods for quantile regression, binary models (such as logit, probit and student-t link), discrete choice models (ordinal, multinomial, sample selection, treatment effects), and latent variable models in the context of cross-sectional, time series and panel data settings. My proposed methodologies tend to exploit existing MCMC methods, such as Gibbs sampling and Metropolis-Hastings algorithm, and other simulation based techniques to overcome the shortcomings of conventional estimation algorithms. To illustrate and emphasize the importance of the proposed methods, I use simulation studies and draw on relevant applications from the field of transportation economics, consumption behavior, development economics, education, sports and political economy.

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