Discussion

Herbie Lee

University of California, Santa Cruz

Department of Applied Mathematics & Statistics

An Objective Bayesian approach for threshold estimation in the Peaks Over the Threshold Model

Combines a semi-parametric model and a generalized pareto distribution with an unknown changepoint for modeling data with extreme values. Uses a mix of objective priors.

Key contributions:

- Fully Bayesian estimation of threshold u
- Semi-parametric model for the central distribution
- Improved results

An Objective Bayesian approach for threshold estimation in the Peaks Over the Threshold Model

Questions:

- How realistic is the uniform prior on the threshold u?
- Do the fits for u in the examples make sense?
- Is there a reference prior?

Bayes Factor Consistency In Linear Models

Well-defined and consistent Bayes Factors for comparing two non-nested linear models, using an improper Jeffreys/reference prior for g in a g-prior

Key contributions:

- Jeffreys/reference prior for g
- Asymptotic consistency of resulting Bayes factors
- Asymptotic consistency of Bayes factors from proper priors (generalization)

Bayes Factor Consistency In Linear Models

Questions:

- How well does this work in practice?
- How large does n need to be for practical consistency?
- How informative is this prior?
- How good is the Laplace approximation for realistic n?
- How would this compare to the BIC?

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noninformative priors (Jeffreys priors)

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comparison of two models

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importance of inference for a key unknown parameter (u or g)