

Model assessment, selection, and inference after model selection

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Instructor: Andrew Johnson
andrew.r.johnson@aalto.fi

Course description

This course will provide a practical, hands-on, guide to the process of comparing and selecting models within a Bayesian workflow. We will discuss the different approaches which can be used for model selection, and the situations that each are most appropriate for. We will also discuss situations where model selection may not be needed, as well as the role of model priors.

The tutorial will primarily cover the usage of cross-validation (CV), leave-one-out estimated log posterior density (LOO-ELPD), and briefly projection predictive variable selection. We will also discuss the usage of the `loo` and `projpred` R packages in this process. We will also briefly cover more advanced approaches at the end of the tutorial.

Course length: 1/2 day