

Title: Workshop: Hierarchical Bayesian Models with Computer Applications

Instructor(s): Jeffrey Rouder

Abstract:

Psychological scientists, by the nature of their work, often have the following two problems: 1. they wish to study complex phenomena (that require finer approaches than regression), and 2. in practice, there are multiple sources of variation across trials, people, and items. These two problems motivate the need for hierarchical nonlinear modeling, and these models are conveniently developed in the Bayesian framework. I cover the motivation for such models, some statistical development, an overview of parameter estimation, and the implementation in statistical package.

Assignment: Active participation, group work, programming exercises

Credit(s): 2 workshop days