Challenges in Longitudinal Data Analysis: A Mixed-Effects Models Approach

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Abstract:

When analyzing longitudinal data or other types of repeated measurement data, assumptions commonly used for mixed-effects models are often unreasonable. This talk will focus on the challenges researchers may encounter in such applications, discussing tools for model evaluation and presenting more complex model specifications in R. Specific challenges addressed will include serial correlation, outliers, skewness, and censored and missing data. Through illustrative examples, I will propose simple solutions by leveraging the R package skewlmm.