BIOS 750: Monte Carlo and Bootstrapping

Class project

Multivariate Normal Data

For next time:

Generate MVN data, autoregressive correlation with $r_{i(i+1)} = 0.7$.

Two groups, n = 20 per group, 4 time points.

Do RM ANOVA on these data, saving p(g*t) interaction.

Do Mixed Models Regression on these data, again saving p(g*t) interaction.

Comparing Imputation Methods

Project details

Two groups of subjects (equal n) n = 20 and n = 100

Assume everyone has a score at baseline.
Responses at times 2, 3, and 4 are missing completely at random.

Assume responses are normally distributed

Correlation between scores? r_{12} = 0, 0.25, 0.5, 0.75
with an autocorrelation structure

% missing: 5%, 10%, 20%, 30%