Experimental design and inferential statistics: An introduction for (computational) linguists.

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This workshop will introduce participants to key aspects of good experimental design, statistical analysis and how the two link together. We will start by discussing different types of experiments and data and how they link to different types of research questions. Next, we'll talk about how inferential statistics work and how they often rely on variance within the data set to generalize beyond the data. After lunch we'll get our hands dirty by learning how to use some of the most commonly used statistical approaches. At the end of the day, we'll look at some new statistical approaches that might be of use for corpus data and also trouble shoot your questions. Bring your computers and your data!

Schedule

9:00-11:00 – Introduction to Experimental Research Methods and inferential statistics: designing a sound experiment

Coffee (I hope)

11:– 13:00 — Introduction to inferential statistics: variance is the key

LUNCH (Most certainly)

14:30-16:00 — Basic statistical tests: t-tests, correlations, anovas. And regressions.

Coffee (almost necessary)

16:00-18:00 — Statistics of interest for corpus data: linear mixed effects models and growth curve analysis.