Oslo Eyehub Workshop on Eyetracking Data Analysis

Dale Barr

10/26/2022

Table of contents

Overview	3
Workshop schedule	3
Getting prepared	3

Overview

Workshop schedule

Time	Activity
09:15-09:30	Introduction by workshop organizers
09:30-10:00	Lecture 1: eyetracking data pre-processing
10:00-10:45	Hands-on session 1
10:45-11:00	BREAK
11:00-11:30	Lecture 2: pre-processing (cont'd) and visualization
11:30-12:15	Hands-on session 2
12:15-13:15	LUNCH (provided)
13:15-13:45	Lecture 3: overview of statistical analysis
13:45-14:15	Hands-on session 3
14:15-14:30	BREAK
14:30-15:00	Lecture 4: cluster-based permutation analysis
15:00-15:45	Last hands-on session
15:45-16:00	Summary and discussion
19:00	Dinner for Eyehub and workshop participants

Getting prepared

We will be working through an existing dataset from a visual world eyetracking study, and writing code in R. You can also work with this dataset during the hands-on exercises, but feel free to try to apply these skills to your own data instead.

Some experience with R and the tidyverse will be helpful, but the workshop will give you an overview of data analysis that will be useful even if you are not an R user, and even if you don't want to participate in the hands-on exercises. All of the materials from the workshop (code, data, slides) will be available at this site for later review.

For the participants wishing to participate in the hands-on parts, you will need the following:

- a laptop
- R version 4.0 or higher (download from r-project.org)

- an Integrated Development Environment such as the RStudio IDE but feel free to use VS-Code or emacs if you prefer and know how to make R scripts or RMarkdown documents in those
- the tidyverse add-on package version 1.3 or higher
- add-on packages lme4 and remotes

I won't be able to provide much tech support so it is a good idea to make sure everything is installed and working before Wednesday.

To find out what version of R you currently have, look at the message that appears when you start R, or type R.version.string in the R console. If you need help installing R and RStudio, please check these resources kindly provided by the PsyTeachR team at the University of Glasgow.

To find out what version of tidyverse you have, type packageVersion("tidyverse"). If you need to update tidyverse (i.e., if you have a version before 1.3), type tidyverse::update_packages() in the console and follow the instructions. You can also find more information about updating packages at the psyteachr site.