ELISE KANBER

ABOUT ME

Data enthusiast seeking to use data science/analytics to generate impactful real-world insights.

Inquisitive problem-solver adept at applying various statistical analysis techniques and programming languages to explore and resolve scientific research questions.

SKILLS

Programming:	R (advanced) | Python (intermediate) | MATLAB (advanced) | JavaScript (beginner)
Coding libraries:	dplyr | tidyverse | ggplot2 | soundgen| NumPy | pandas | seaborn | matplotlib | scikit-learn
Data analysis:	Data cleaning, wrangling, transformation | Statistical analysis & modelling | Visualisation
Statistics:	Hypothesis testing | Probability theory | Regression | Parametric & non-parametric Methods | Descriptive statistics | General Linear Model | Linear mixed models | fMRI timeseries

EDUCATION

PhD in Cognitive Neuroscience, University College London **2018 – 2022**

- Thesis title: "Behavioural and neural insights into the recognition and motivational salience of familiar voice identities".

BSc Psychology, Royal Holloway University of London (1^{st} class, hons) **2014 – 2017**

- Relevant modules: Real-world quantitative techniques, Research methods & statistics
- Received the BPS prize for highest overall mark in the graduating year, and the Dorothy Farrar research prize for an outstanding final-year research project.

EXPERIENCE

Postdoctoral Researcher, University College London **2022 – present**

Role involves leading large scale multi-stage neuroimaging (fMRI and real-time vocal tract MRI) projects with human research subjects.

- Oversaw all aspects of the research pipeline including devising research questions alongside collaborators, designing and programming experiments (using MATLAB's PsychToolbox), participant recruitment and data collection.
- Produced comprehensive automated data cleaning and data analysis pipelines for the processing of various types of data, including acoustic, neuroimaging, vocal-tract imaging, and multimodal human research subject data.

- Harnessed computational methods to relate patterns of brain activity to cognitive representations of vocal identity in the brain.
- Managed effective communication with internal and external collaborators, including researchers, MR physicists, and research assistants.

PhD Researcher, University College London **2018 – 2022**

- Completed a multi-methods PhD research project in a STEM subject within 3.5 years.
- Developed, conducted, and analysed data from human research subjects across 7 behavioural and neuroimaging experiments.
- Programmed and devised experiments for both online and in-person use (MATLAB), visualised the data and ran statistical analyses (R).
- Published 4 research articles in peer-reviewed journals and presented talks/research posters at national and international conferences.
- Research outcomes include progressing our understanding of human voice recognition, as well as unveiling novel neural insights into the motivational and rewarding nature of familiar voices.

Statistics Module Course Instructor (R), University College London **2019 – 2021**

- Introduced MSc and BSc students to core statistical concepts (e.g. hypothesis testing, regression, probability theory, distributions)
- Equipped students to confidently use R to import data, perform data cleaning and wrangling (dplyr, tidyverse), data analyses (regression, correlation, ANOVA etc.), data visualisation (ggplot2), with emphasis on being able to understand and describe outcomes of these analyses.
- Assisted in initial course development, provided feedback to students on a weekly basis, and troubleshot coding and theoretical queries.

PROFESSIONAL DEVELOPMENT

2022-23 **Python for Data Science and Machine Learning Bootcamp**, Udemy

2022 **Learn JavaScript,** Codecademy (incomplete, required basic JS skills to enable bespoke functionality in a web-based experiment).

2019 **PsyTeachR,** University of Glasgow

2018 **Statistical Parametric Mapping (SPM) for fMRI & MRI/VBM**, Wellcome Centre for Human Neuroimaging

2018 **Research Methods: Principles, Skills, & Applications,** University College London

2018 **The Pirate's Guide to R,** Nathaniel D. Phillips

2017 **MATLAB for Psychologists,** Antonia Hamilton

References available upon request