DOMINIK FREUNBERGER

Data Scientist & Linquist

PROFILE

I am a data scientist with a background in linguistics and vast experience in cognitive neuroscience, a curious learner with a drive to tell stories with data.

CONTACT



HUMAN LANGUAGES



COMPUTER LANGUAGES



OTHER

- Experimental design, hypothesis testing, data visualisation
- Mixed multiple linear and logistic regression, generalised additive mixed models, time series
- Data cleansing and preparation
- Git version control
- Excellent communication skills in speaking and writing
- High motivation to present complex ideas to a general audience
- Collaborative and caring team player
- Creative critical thinker with high ethical standards

RECENT EXPERIENCE

Data Science Fellow

Science to Data Science, London (virtual), August 2021

- In a project commissioned by the Food Standards Agency, we assessed
 the usefulness of social media to understand changes in behaviours and
 attitudes towards food during the 18 months of the COVID-19 pandemic.
- Using NLP and machine learning methods, we distilled main trends, allowing us to detect a valuable signal in the data.
- We successfully delivered a proof-of-concept that social media listening can be reliably used to observe consumer behaviours in almost real-time, which can be of great value to the client when responding to rapidly changing events.

Postdoctoral Researcher

Stockholm University / Stockholm / 2018 - 2021

- Design and management of a large-scale neuroimaging experiment on second language processing and representation in the brain.
- We published a review paper from this project in the top journal in the field of linguistics, *Applied Linguistics*.
- I designed an R pipeline to process, analyse, and visualise electrical brain activation and behavioural data.

Postdoctoral Researcher

BIFIE (now IQS) Austria / Salzburg / 2017 - 2018

- Design, development, validation and standard setting of a UX-supported language assessment and training tool for children, in close collaboration with highly heterogeneous stakeholders.
- In a tense field of expectations and limitations, we successfully rolled out this tool, which is now used by thousands of teachers in Austria.
- In a series of seminars, I had the honour to introduce the field of linguistics, language development, and assessment to hundreds of teachers and language therapists.

EDUCATION

PhD in Linguistics

University of Salzburg Salzburg / 2011 - 2017

Research on predictive and semantic language processing in the brain using neuroimaging and behavioural methods.

MSc in Psycholinguistics

University of Salzburg Salzburg / 2009 - 2011

BSc in Linguistics

University of Salzburg Salzburg / 2006 - 2009

SELECTED PUBLICATIONS

Freunberger, D., Bylund, E., & Abrahamsson, N. (In press). Is it time to reconsider the 'gold standard' paradigm in ERP studies on grammatical processing in a second language? A critical assessment based on qualitative individual differences. To appear in *Applied Linguistics*.

Freunberger, D., & Roehm, D. (2017). The costs of being certain: Brain potential evidence for linguistic pre-activation in sentence processing. *Psychophysiology*, *54*, 824–832.

Freunberger, D., & Roehm, D. (2016). Semantic prediction in language comprehension: Evidence from brain potentials. *Language, Cognition and Neuroscience, 31,* 1193–1205.