# Max Welz

PhD Candidate in Statistics – Erasmus University – Rotterdam, NL

☑ welz@ese.eur.nl

https://mwelz.github.io

**?** mwelz

# **Employment**

**Erasmus University, Dept. of Econometrics** 

PhD Candidate in Statistics

Rotterdam, NL Since May 2020

Supervisors: Prof. Patrick Groenen and Dr. Andreas Alfons.

Erasmus Medical Center, Dept. of Public Health

External Researcher

Rotterdam, NL Since Jun. 2019

Rotterdam, NL

• Master thesis on causal inference in lung cancer research.

• Involvement in analyses of medical trials.

Erasmus University, Dept. of Econometrics

Aug. 2018 - Nov. 2019 Research Assistant

Assisted Prof. Philip Hans Franses for 10 hours a week.

Education

**Erasmus University** Rotterdam, NL

MSc Econometrics Aug. 2017 – Apr. 2020

**University of Mannheim** 

BSc Economics (specialization in Econometrics)

Spent Fall 2016 at the Erasmus University in Rotterdam, NL.

Mannheim, DE Sep. 2014 - Jul. 2017

### **Research Interests**

• Robust statistics (robust inference in non-continuous data);

- Mathematical statistics (empirical process theory and high-dimensional models);
- Computational statistics (algorithms for robust inference in large data sets);
- Statistical applications in medicine, psychology, and economics.

#### Grants

- *Open Mind Call 2021 Health and Technology* (€19,995.70).
  - Joint with Andreas Alfons (Erasmus University) and Kevin ten Haaf (Erasmus MC);
  - Issued by the Dutch Convergence Alliance (acceptance rate of  $22/124 \approx 18\%$ ),
  - Awarded for the *CITRUS* project.

### **Presentations**

#### Conference presentations:

Welz, M. and Alfons, A. Outlier Detection in Rating-Scale Data via Autoencoders. International Conference on Robust Statistics, September 21–24, 2021, Vienna, Austria (scheduled).

Welz, M. and ten Haaf, K. Evidence-Based Medicine Meets Causal Inference. Econometric Institute Internal Seminar, July 21, 2020, Rotterdam, The Netherlands.

# **Organization Service**

#### **Local Organization Committee:**

- Data Science, Statistics & Visualization and European Conference on Data Analytics 2021 (joint conference). July 7–9, 2021. Erasmus University Rotterdam, NL (online).
- Data Science, Statistics & Visualization 2020. July 29–31, 2020. Duke University, USA (online).

# **Teaching**

#### **Erasmus University Rotterdam:**

- FEB22015X: Academic Skills (Econometrics). Role: Teacher. Spring 2021 (online).
- FEB23012: Seminar in Econometrics. Role: Group supervisor. Spring 2021 (online)
- FEB21018X: Introduction to Statistics. Role: Tech support. Fall 2020 (online).
- FEB2003X: Introduction to Multivariate Statistics. Role: Teacher. Fall 2019.
- Main supervisor of 5 bachelor theses.
- Second assessor of 5 bachelor theses and 2 master theses.

More information such as teaching evaluations can be found on my teaching webpage.

# **Scientific Organizations**

- Member of the *Institute of Mathematical Statistics*.
- Member of the International Association for Statistical Computing.

## **Software**

• **GenericML** (**O** mwelz/GenericML). R implementation of *Generic Machine Learning Inference*.

#### Skills

**Software**: C, C++, Java, Julia, L<sup>A</sup>T<sub>E</sub>X, Matlab, Python, R, Stata, Bash, Zsh, Windows, macOS, Linux (e.g. Ubuntu, Fedora).

Human languages: German (native), English (fluent), Dutch (advanced), French (beginner).

#### References

Patrick Groenen	Andreas Alfons	Philip Hans Franses
Professor of Statistics	Associate Professor of Statistics	Professor of Applied Econometrics
Dept. of Econometrics	Dept. of Econometrics	Dept. of Econometrics
Erasmus University	Erasmus University	Erasmus University
☑ groenen@ese.eur.nl	☑ alfons@ese.eur.nl	☐ franses@ese.eur.nl

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