# Max Welz

PhD Candidate in Statistics - Erasmus University - Rotterdam, NL

☑ welz@ese.eur.nl

https://mwelz.github.io

**O** 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

Rotterdam, NL Since Jun. 2019

External Researcher

Research Assistant

• Master thesis on causal inference in lung cancer research.

• Involvement in analyses of medical trials.

Erasmus University, Dept. of Econometrics

Rotterdam, NL

Aug. 2018 - Nov. 2019

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

## Education

**Erasmus University** 

Rotterdam, NL

MSc Econometrics

Aug. 2017 – Apr. 2020

University of Mannheim

Mannheim, DE

BSc Economics (specialization in Econometrics)

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

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.

### **Publications**

#### **Software**

Welz, M., Alfons, A., Demirer, M. and Chernozhukov, V. GenericML: Generic Machine Learning *Inference*. R package. [GitHub | CRAN]

### 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.

#### Seminars

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

#### **Miscellaneous Presentations**

Presentation of chapters in Van der Vaart's 1998 book "Asymptotic Statistics" to the reading group "Mathematical Statistics" at the math department of TU Delft. Since November 2021.

### **Grants and Awards**

#### 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.

#### **Awards**

- 2021 Convergence Health and Technology Open Research Award [link].
  - Awarded for "great commitment to open research";
  - Issued by the Dutch *Convergence Alliance* and several open science initiatives;
  - One of 12 recipients from various Dutch scientific institutions.

# **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.
- Thesis supervision:
  - 10 student theses for *BSc Econometrics* (5 as second assessor);
  - 2 student theses for *MSc Econometrics* (all as second assessor).

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

# Scientific Organizations

I am a member of the following organizations:

- *Institute of Mathematical Statistics*;
- International Association for Statistical Computing;
- *Open Science Community Rotterdam.*

#### 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

Professor of Statistics
Dept. of Econometrics
Erasmus University

☑ groenen@ese.eur.nl

### **Andreas Alfons**

Associate Professor of Statistics Dept. of Econometrics Erasmus University ☑ alfons@ese.eur.nl

# **Philip Hans Franses**

Professor of Applied Econometrics
Dept. of Econometrics
Erasmus University

☑ franses@ese.eur.nl

Last updated: December 1, 2021.