

# Max Welz

PhD Candidate in Statistics – Erasmus University – Rotterdam, NL

✉ [welz@ese.eur.nl](mailto:welz@ese.eur.nl)

🌐 <https://mwelz.github.io>

🐙 [mwelz](#)

## Employment

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**Erasmus University, Dept. of Econometrics**

*PhD Candidate in Statistics*

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

**Rotterdam, NL**

*Since May 2020*

**Erasmus Medical Center, Dept. of Public Health**

*External Researcher*

- Master thesis on causal inference in lung cancer research.
- Involvement in analyses of medical trials.

**Rotterdam, NL**

*Since Jun. 2019*

**Erasmus University, Dept. of Econometrics**

*Research Assistant*

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

**Rotterdam, NL**

*Aug. 2018 – Nov. 2019*

## Education

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**Erasmus University**

*MSc Econometrics*

**Rotterdam, NL**

*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

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- 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

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- *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

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### 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).

### Seminars:

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

## Organization Service

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### 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

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### 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

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- Member of the [Institute of Mathematical Statistics](#).
- Member of the [International Association for Statistical Computing](#).

## Software

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- **GenericML** ( [mwelz/GenericML](#)). R implementation of *Generic Machine Learning Inference*.

## Relevant Skills

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### Software skills:

- Operating systems: Windows, macOS, several Linux distributions (e.g. Ubuntu, Fedora).
- Tools/languages: Bash, C/C++, Git/GitHub, Java, Julia,  $\LaTeX$ , Matlab, Python, R, Stata.

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

## References

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### Patrick Groenen

Professor of Statistics  
Dept. of Econometrics  
Erasmus University

✉ [groenen@ese.eur.nl](mailto:groenen@ese.eur.nl)

### Andreas Alfons

Associate Professor of Statistics  
Dept. of Econometrics  
Erasmus University

✉ [alfons@ese.eur.nl](mailto:alfons@ese.eur.nl)

### Philip Hans Franses

Professor of Applied Econometrics  
Dept. of Econometrics  
Erasmus University

✉ [franses@ese.eur.nl](mailto:franses@ese.eur.nl)

*Last updated: August 20, 2021.*