# Rick Willemsen

Erasmus University Rotterdam, Economtric Institute

⋈ willemsen@ese.eur.nl Date of birth: 24-01-1997

#### Research interests

Mixed integer programming, inverse methods, clustering

#### Education

2020–2024 Erasmus University Rotterdam, The Netherlands.

(expected) Ph.D. in Operations Research and Statistics
Inverse methods for data retrieval and simulation

Supervisors: dr. Wilco van den Heuvel and dr. Michel van de Velden

2023 Polytechnique Montréal, Canada.

Research visit

Host: prof. dr. Daniel Aloise

2019–2021 Erasmus University Rotterdam, The Netherlands.

M.Sc. in Econometrics and Management Science

Specialisation: Business Analytics and Quantitative Marketing

GPA 8.2/10

2019–2020 Erasmus University Rotterdam, The Netherlands.

M.Sc. in Econometrics and Management Science

Specialisation: Operations Research and Quantitative Logistics

GPA 8.7/10

2015–2019 **Erasmus University Rotterdam**, The Netherlands.

B.Sc. in Econometrics and Operations Research, GPA 8.5/10

B.Sc. in Economics and Business Economics, GPA 8.3/10

Minor in Advanced Computer Science

2018 City University, Hong Kong, Exchange semester.

# Research papers & publications

#### Journal articles

Willemsen, R. S. H., Van den Heuvel, W., and Van de Velden, M. (2023). A new mixed integer programming approach for inverse correspondence analysis. *Computers & Operations Research*, 160.

#### Under review

Willemsen, R. S. H., Van den Heuvel, W., and Van de Velden, M. (2023). On the uniqueness of correspondence analysis solutions.

#### Working papers

Bouman, P., Tiniç, G., Willemsen, R. S. H., and Veelenturf, L. P. (2023). From self driving cars to the next generation of public transport.

Willemsen, R. S. H., Cavicchia, C., Van den Heuvel, W., and Van de Velden, M. (2023a). Exact methods for hierarchical clustering.

Willemsen, R. S. H., Van de Velden, M., and Van den Heuvel, W. (2023b). Random contingency tables with given marginals, explained inertia and Cramer's V.

### Research experience

2020 Graduate Intern, Netherlands Railways, Utrecht, The Netherlands.

Topic: A column generation approach for the integrated crew rostering problem with fairness and attractiveness requirements

Supervisor: prof.dr. Dennis Huisman

2019-2020 Research Assistant, Erasmus University Rotterdam, The Netherlands.

Topic: The pickup and delivery problem with online transfers, for the next generation of public transport.

Supervisor: dr. Paul Bouman

**Research Assistant**, Erasmus University Rotterdam, The Netherlands.

Topic: Optimal interventions in network models.

Supervisor: dr Evelot Duijzer

### Work experience

2018 **Student Assistant**, Pointlogic, A Nielsen Company, Rotterdam, The Netherlands.

### Teaching experience

2016–2024 **Teaching Assistant**, Erasmus University Rotterdam, The Netherlands.

Teaching tutorial groups (25 students) and exercise lectures (>100 students) on bachelor level. Creating and grading assignments and exams. Supervising bachelor and master theses.

- Introduction to Statistics
- Introduction to Analysis
- Analysis
- Introduction to Programming
- Programming
- Matrix Algebra
- Introductory Seminar Case Studies Econometrics
   Master Thesis supervisor and Operations Research
- Econometrics 1
- Econometrics 2
- Non-linear Optimisation
- Academic Skills
- Mathematical Methods
- Bachelor Thesis supervisor

# Seminars & conference presentations

- May 2023 Column Generation Workshop 2023, Montréal, Canada.
- Jan 2023 LNMB 2023 Conference, Soesterberg, The Netherlands.
- Oct 2022 VOC 2022 Conference, Tilburg University, The Netherlands.
- Sept 2022 ECDA 2022 Conference, University of Naples Federico II, Italy.
- July 2022 EURO 2022 Conference, Aalto University, Espoo, Finland.
- March 2022 EIPC 2022, Erasmus University Rotterdam, The Netherlands.
  - July 2021 EURO 2021 Conference, University Of West Attica, Athens, Greece.
  - July 2021 DSSV-ECDA 2021 Conference, Erasmus University Rotterdam, The Netherlands.
  - April 2021 Operations Research Seminar, Erasmus University Rotterdam, The Netherlands.

#### Awards & certificates

- 2023 ROADEF2022 3D Truck Loading Competition, 1st place in junior category
- 2018 FAECTOR Excellence Programme, on Econometrics & Artificial Intelligence
- 2016 **First-year cum laude,** double degree Bsc2, GPA 9.2/10

# Reviewing

Journal of Classification

# Skills

Languages

Programming Java, C++, Python, MATLAB, R, MySQL

# Languages

Dutch Native

English Full professional proficiency Chinese Limited working proficiency

# References

Dr. Wilco van den Heuvel, wvandenheuvel@ese.eur.nl

Dr. Michel van de Velden, vandevelden@ese.eur.nl