✉ mrcs.rsch@gmail.com

🌐 mrcsrsch.github.io

⌂ mrcsrsch

in marcus-roesch

SKILLS

Econometrics: regression models, bootstrapping, hypothesis testing

Causal Inference: Treatment effect estimation (diff-in-diff, synthetic control, matching, double ML), A/B testing, experimental design

Machine Learning: Supervised (tree-based, ensemble, SVM, neural networks), Unsupervised (clustering, dimensionality reduction), Time series (ARIMA, GARCH, forecasting)

Data Science: Data Visualization (ggplot2, Tableau), Relational Databases (SQL), Version Control (Git)

Programming: R, Python, Bash

Economics: Policy analysis, demand estimation, int. trade & labor economics

CERTIFICATES

2024: Machine Learning for Business; Deep Learning

2023: Econometrics of Networks; SQL

2022: Foundations of Data Analysis and Machine Learning in Python

OTHER

- Published in academic journals
- German (native), English (fluent), Dutch (advanced), Spanish (basics)

Marcus Rösch, PhD

Profile: Curious Data Scientist with PhD-level training in statistics, machine learning, and causal inference. Over five years of experience analyzing complex data in R and Python. Strong problem-solving, communication and presentation skills. Excited about using data to solve business challenges across industries.

WORK EXPERIENCE

Data Scientist   `09/24 - 12/24`
Erasmus School of Economics, Netherlands

- Collaborated with senior management; served as research lead in task force
- Devised strategic response to educational reform by analyzing alumni data

Quantitative Researcher   `09/19 - 08/24`
Erasmus School of Economics, Netherlands and Statistics Netherlands (CBS)

- Developed four end-to-end analysis pipelines in SQL and R on datasets with 1B+ entries
- Led three data-centric research projects; managed stakeholder engagement across academia and government
- Published academic articles; presented at international conferences
- Mentored 40+ research projects, taught Econometrics at master's level

EDUCATION

Ph.D. Economics   `2019 - 2024`
Erasmus University Rotterdam, Netherlands
Specialization: Applied Econometrics, Trade, Labor Economics

Dissertation: Multinational Firms and Local Workers 📖
Research visit to **Bocconi University, Italy**

Research Qualification   `2019 - 2021`
Tinbergen Institute, Netherlands
Specialization: Econometrics and Machine Learning

Selected courses: Econometrics II - Causal Inference, Econometrics III - Time Series, Supervised Machine Learning, Unsupervised Machine Learning, Deep Learning

M.Sc. Economics   `2017 - 2018`
Utrecht University, Netherlands
with distinction 'cum laude'

Award for Best Master's Thesis

B.Sc. Quantitative Economics   `2014 - 2017`
University of Konstanz, Germany
with distinction 'very good'