Kory D. Johnson, PhD

Senior Data Scientist & Consultant

korydjohnson.com korydjohnson

[in] Kory D. Johnson Stats@korydjohnson.com

I work within industry and academics to deliver cutting-edge analyses and scientific reports in disparate application domains. I have spent many years surrounded by problems in business, economics, and biology, and I have both used and taught a diverse array of statistical tools to solve them. I deliver publishable methodology, striking graphics, and production-level code.

EXPERIENCE

KORY D. JOHNSON, EPU | STATISTICAL CONSULTANT

April 2022 - Current | Remote

- → Diverse consulting projects supporting academic researchers and industry.
- → Data cleaning, model generation/verification, assumption checking, multilevel analysis, feature selection, factor analysis, writing and graphing for publication etc.
- → Continued teaching at the University of Vienna and Medical University of Vienna.

WEB WINDENERGIE AG | FORECAST STATISTICIAN

April 2023 - October 2023 | Pfaffenschlag, Austria

- → Forecast energy production in wind, solar, and biomass combustion power plants.
- → Wrote a statistical Al program to forecast consumption of commercial clients.

ACADEMIC POSITIONS | Assistant Professor, non-tenure track

September 2016 – July 2022 | Vienna, Austria

- → TU Wien; Vienna University of Economics and Business; University of Vienna
- → Published in leading scientific journals and conferences in statistics, machine learning, epidemiology, data mining, and computer simulation.
- → Wrote, documented, and published R packages implementing novel algorithms.
- → Gave invited talks at professional conferences across Europe and the US.

SHELTERLUV | STATISTICAL CONSULTANT

May 2020 - December 2020 | Remote

- → Start-to-finish solo project under my direction in consultation with the COO.
- → Data cleaning, processing, wrangling, modeling, analysis, and visualization in R.

DETAILS OF SELECTED PROJECTS

WEB WINDENERGIE AG | R, AI FORECAST PROGRAM, PRODUCTION CODE

- → At regular intervals, the program automatically downloads and processes data from a data base, performs model building, evaluation, selection, and forecasting.
- → Reduced error of metrics of previously used models by up to 60%.

ROBUST MODELS OF SARS-COV-2 | R, JOURNAL PAPER, PACKAGE DEVELOPMENT

- → Led research group of 5 which included professors, post docs, and PhD students.
- → Paper written for epidemiologists and was lauded by anonymous reviewer as "one of the best COVID modeling papers ... in terms of technical depth and clarity".

PREDICTION INTERVALS FOR NEURAL NETWORKS | PYTHON, ML CONFERENCE PAPER

- → Developed a regression neural network which provides provably valid prediction intervals around its estimates; can be applied to nearly any network architecture.
- → Data applications include time series, image analysis, and sales prediction.

SHELTERLUV | R, Nontechnical White Paper Cited by the Company

- → 1.5 million transaction records from Shelterluv's nearly 600 business customers.
- → Demonstrated statistically sound, causal claims about Shelterluv's positive.

SKILLS

PROGRAMMING

Expert:

R (base, tidyverse) • LATEX

Python (PyTorch, pandas, sklearn) • SQL • Microsoft Office

Familiar:

C# • Matlab • VBA

TOOLS/PLATFORMS

Git • Linux • Jupyter

EDUCATION

THE WHARTON SCHOOL

UNIVERSITY OF PENNSYLVANIA

M.A. STATISTICS; Ph.D., STATISTICS 2011 - 2016 | Pennsylvania, USA School of Business

THE WHARTON SCHOOL

UNIVERSITY OF PENNSYLVANIA

B.S. IN ECONOMICS SUMMA CUM LAUDE 2007 - 2011 | Pennsylvania, USA School of Business

COLLEGE OF ARTS AND SCIENCES

UNIVERSITY OF PENNSYLVANIA

B.A. IN PHILOSOPHY AND **ECONOMICS**

SUMMA CUM LAUDE; WITH DISTINCTION 2007 - 2011 | Pennsylvania, USA Liberal Arts School

ADDITIONAL

German (B2/C1) • Spanish (A2)

English (native)

Rock Climbing • Splitboarding • Ski Touring • Gaming