Izel Fourie Sørensen

Data Analyst

Personal information

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LinkedIn

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Portfolio

https://izelfourie.github.io/Portfolio/

Language

- Danish - Fluent
- English - Fluent
- Afrikaans - Native

Profile

Originally a pharmacist, my passion for working with data motivated me to complete a Bachelor's degree in Data Analysis. Combined with previous freelancing data analysis experiences, I've gained in-depth knowledge of machine learning algorithms, data modelling and predictive analysis. My hands-on experience with the R programming language allows me to perform well-constructed analyses, and my analytical background helps me translate complex questions into relevant data models.

My career path illustrates my determination and adaptability. I bring a blend of enthusiasm and dedication to any team I join.

Competencies

Statistical learning/machine learning in R

Analysis reports in Quarto/R Markdown

Data editing and visualisation in R

Presentation of analysis results

Manuscript writing

Knowledge of SQL for retrieving and preparing data

Work experience

Pharmacist • Viborg Regional Hospital
Fixed term
11/2024 - 01/2025

Conducted a literature study on polypharmacy, which was summarised in an internal report. I prepared a poster based on the findings and presented the results at a workshop for hospital staff.

Data analyst internship • Department of Research, Viborg Regional Hospital
08/2024 - 09/2024

During my internship at the Department of Research at Viborg Regional Hospital, I gained valuable insight into the role of a Data Manager.

I performed descriptive analysis and visualisation of hospital business intelligence data and REDCap data using R, contributing to a research project focused on transitions between hospital care and the primary healthcare sector.

This work was documented in an R Markdown report, which I presented during a meeting with the project team.

Internship and Bachelor Project • BetaShared
08/2023 - 01/2024

Applied Bayesian Linear Regression models on simulated data to investigate the effect of various data-sharing scenarios on prediction accuracy.

Quality Assurance Assistant • PharmaService I/S
12/2020 - 08/2022

Associate Scientist • Genomics PLC, Oxford
01/2019 - 07/2020

- Interpreting and reporting genetic analyses results.
- Experience with GitHub and computer cluster systems.
- Editing large genetic datasets using R programming language.

Pharmacist (Part time) • Stoholm Pharmacy
06/2013 - 12/2018

Freelance Data Scientist
06/2013 - 12/2018

- Applying statistical models to genetic data to determine genotype-phenotype associations as well as predicting phenotypes. These analyses were done using the qgg software package in R.
- Results published in peer reviewed journals (see publication section).
- Preparation of a user guide for the qgg software package in R. The documents are available on GitHub (https://github.com/IzelFourie/qgg-user-guide).

Internship Data Scientist • BioXpedia
01/2018 - 03/2018

Analysed protein biomarker data.

Contract Researcher • University of Alabama at Birmingham (UAB), USA
03/2013 - 05/2013

Genetic data analysis in the context of personalised medicine. Results published in the journal "Pharmacogenetics and Genomics".

Clinical Pharmacist (maternity cover) • Hospital Pharmacy Viborg
05/2012 - 02/2013

Quality Assurance Pharmacist (maternity cover) • Hospital Pharmacy Viborg
09/2009 - 11/2010

Postdoc • Faculty of Agricultural Sciences, Aarhus University
2005 - 2009

Investigated the neuroprotective effect of phytoestrogens using cell culture techniques.

Research Associate • Department of Chemistry, Virginia Tech, Blacksburg, VA, USA
2000 - 2002

Education

Professional Bachelor in Data Analysis • Dania Academy, Viborg
09/2022 - 01/2024

The education included training in business understanding and data analysis, with projects that used statisticalmodelling to solve real-world business challenges. It also included training in visualization and in the oral and writtenpresentation of analysis results. The programming language R was used for data modelling.

Cand.pharm. • Copenhagen University, Copenhagen
09/2008 - 08/2009

PhD in Pharmaceutical Chemistry • North-West University, South Africa
2000 - 2004

(Earlier known as "Potchefstroom se Universiteit vir Christelike Hoër Onderwys".)

B.Pharm. (Bachelor in Pharmacy) • North-West University, South Africa
1994 - 1997

Relevant publications

Rohde PD, Sørensen IF, Sørensen P. 2020. qgg: an R package for large-scale quantitative genetic analyses. Bioinformatics 36:2614–2615. doi: 10.1093/bioinformatics/btz955

Sørensen IF, Edwards SM, Rohde PD, Sørensen P. 2017. Multiple trait covariance association test identifies gene ontology categories associated with chill coma recovery time in Drosophila melanogaster. Scientific Reports 7:2413.doi:10.1038/s41598-017-02281-3

Stefan EM, Sørensen IF, Sarup P, Mackay TFC, Sørensen P. 2016. Mapping variants to gene ontology categories improves genomic prediction for quantitative traits in Drosophila melanogaster. Genetics 203:1871-1883. doi:10.1534/genetics.116.187161

Sørensen IF, Vazquez AI, Irvin MR, Sørensen P, Davis BR, Ford CE, Boerwinkle E, Arnett DK. 2014. Pharmacogenetic effects of “candidate gene complexes” on stroke in the GenHAT study. Pharmacogenetics and Genomics 24:556–563. doi: 10.1097/FPC.0000000000000088