

# Harry Ritchie: Data Scientist

Data Science needs solid direction.  
Too often, we're lead astray by the buzz and hype of Data Science.  
I'm here to make it wholesome again.

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## Harry Ritchie: Data Scientist

### Links

[LinkedIn](#)

### Professional Experience

#### Ottobock GmbH iFab: Data Analytics Expert 02/2021 - Current

- Developed on existing 3D scanning technology by using Machine Learning models to improve quality and resolution of an affordable 3D scanner.
- Improved testing of 3D scanning products for orthotics by developing an automation platform that allows medical professionals to automate statistical analyses for a variety of prosthetics and orthotics.
- Lead and drove the implementation of a 1 million euro research project focused on Industry 4.0 for scan-to-print applications. Our proposed applications generates valuable data to enhance and speed up lower-limb prosthetic fitting process: achieving a one-time patient visit.
- Creation of Data Science strategy within iFab; increasing reproducibility, data literacy and assessment of Data Science projects.
- Working closely with partners in France on a cost-effective 3D landmark detection model.

#### PREA GmbH: Data Scientist 02/2020 - 02/2021

- Improved real estate listings with the use of Google Places API; generating liveability scores for customers.
- Development of social clusters and designing inferential studies to generate insights: families associate with distance from schools and supermarkets. These clusters aided in driving PREA's AI engine, Mercury.

#### Enduco: Data Science Consultant 09/2019 - 02/2020

- Developed and improved SEO advertisement by analysing changes in a popular cycling blog. I developed a topic model to identify changes in blog topics over periods of three months. The model

helped marketing in identifying current word sets for attracting new customers.

## DFKI: Data Scientist 01/2017 - 08/2019

- Implemented a staff planning model by estimating time-to-checkout of customers for a large supermarket chain.
- Identifying user groups to improve staff planning and cater to shoppers based on their specific behaviour. For example, learning from the "small item shoppers": improving their shopping experience by making their quick shop as accessible and pain free as possible; encouraging customers to continue shopping with selected supermarkets.

## My Toolbox

Primary Tasks	Common Patterns
Cloud Development (Azure)	<ul style="list-style-type: none"><li>- Deployment of Azure Functions</li><li>- Deploying Container Instances and Groups</li><li>- CI/CD Azure Devops Pipelines and automation</li><li>- The L in ETL/ELT pipelines</li></ul>
Database Tooling	<ul style="list-style-type: none"><li>- Deployment of Relational Databases and automation (ARM scripts).</li><li>- DBT modeling for transformation processes to create feature tables for models and descriptive platforms (dashboards, reporting)</li></ul>
Statistical Modeling	<ul style="list-style-type: none"><li>- Question based notebook experiments; shared for full-team transparency.</li><li>- Close communication with domain experts to determine key model metrics and relationships to business goals.</li><li>- Deployment of models as REST APIs: as an Azure Function, or Container Instance.</li><li>- Reporting and communication.</li></ul>

## Personal Experience

### Improv Theater 06/2021 - Current

Currently performing in a variety of teams and independent monologues.

- Team: "Not Boris Johnson",
- Team: "We Don't Do That here"
- Team: "Roses Are Red"
- Character Monologue: "Joahannes Stahl: An Entrepreneur for The Modern Renaissance Man"

## Education

### MSc Bioinformatics

*University of Saarland 10/2015 - 07/2019*

### BAppSci Biochemistry / Mathematics

*Queensland University of Technology 01/2012 - 07/2015*

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