

Functie	Junior Data Scientist / Missing Data Specialist
Naam	R.M.Schouten
Voornaam	Rianne
Geboren	11/05/1991
Geslacht	Vrouw
Woonplaats	Utrecht
Website	RianneSchouten.github.io



Motivatie

When you get to know me, you will recognize an enthusiastic and motivated person who is always eager to learn. I have an open and direct personality, and some self-deprecating humor. Working with me never becomes boring, since I continuously make new plans or I will make some weird but funny statements. First and foremost, I intent to deliver work with a more than good quality.

Education

04/2017 – current

Excellence Program for Data Science – BigData Republic

1 day a week training by Senior Data Scientists from BigData Republic

The goal is to add business value by applying my skills in the field of data science (feature engineering, classification, regression, complex models). Key here is communication, understanding where data science can help business, and reporting project outcomes. Second is to learn and keep up to date with the latest techniques and expanding my knowledge in the Excellence Program for Data Science during my traineeship.

- **Core IT skills:** Asana, Python, Linux basics, Code versioning & sharing in GIT, Virtual machines, SQL
- **Core data science skills:** Data science pipeline, Statistics, Multiple linear regression, Clustering, Feature engineering, Feature space visualisation
- **Toepassen van data science op use cases:** Hands on categorization, Hands on clustering, Hands on regression, Hands on Kaggle
- **Advanced data science skills:** Ensemble, Neural networks, Evolutionary algorithms
- **Toepassen van advanced data science op use cases:** Hands on Kaggle, Custom assignment
- **Consulting skills:** translating the business requirements to data science strategic innovation

More info: www.dpadatascience.nl

09/2014 – 05/2017

Research Master Methodology and Statistics for the Behavioural, Biomedical and Social Sciences, Utrecht University

Master of Science (MSc), GPA: 4.0

This research master's programme focuses at the methodological and statistical aspects of social and biomedical research. I am learning in depth knowledge about a multiple of statistical analyses, their assumptions and applications. I especially enjoy to dig deeper into the mathematical background of the analyses and how we can use computer techniques to gain the information we desire.

09/2013 – 08/2014

Preparatory Programme Social Policy and Social Interventions, University of Utrecht

Complete 30 ECTS



02/2013 – 06/2013 **Preparatory Programme Social Sciences, University of Amsterdam**
Complete 30 ECTS

09/2009 – 08/2012 **Bachelor Medicine, University of Utrecht**
Bachelor of Science (BSc), GPA: 3.24

Research

01/2016 - current **Department of Methodology and Statistics, University of Utrecht**
Missing Data Research
The occurrence of missing data is a ubiquitous problem in scientific research. Therefore, we develop missing data methodology such as multiple imputation techniques. For an accurate evaluation of these missing data methods, a legitimate amputation procedure (i.e. generating missing values in a complete data set) is of great importance.

I developed a multivariate amputation procedure, which I implemented into an R-function. Amputation function 'ampute' is available in R-package mice, and enables the generation of missing values in multiple variables, based on the values of multiple variables, with any desired missingness percentage and much more. Most importantly, ampute produces valid, complicated and realistic missing data problems, which make the procedure an efficient method to accurately evaluate missing data methodology.

11/2016 - 12/2016 **Department of Statistics, Columbia University in the City of New York**
Staff Associate
For a two month period, I assisted dr. Gerko Vink with his research in the field of missing data. My work at Columbia University is quite diverse, ranging from reviewing literature to developing R-code and running simulations. My cooperation with dr. Gerko Vink resulted in some nice insights which we will publish any moment. Dr. Gerko Vink performs his research in cooperation with Prof. Andrew Gelman.

09/2015 – 12/2015 **Dutch Institute for Space Research (SRON)**
Internship Material Science, Grade: 9.0
The Use of Principle Component Analysis in Analyzing Fe-55 X-Ray Pulses
The technique of PCA is considered to function better than the traditional method of matched filtering. By means of a simulation study and by digging into an experimental data set, I obtained information about the possibilities of using PCA in analysing X-ray data. My work resulted in a SPIE conference paper:

de Vries, C. P., Schouten, R. M., van der Kuur, J., Gottardi, L., & Akamatsu, H. (2016, July). Microcalorimeter pulse analysis by means of principle component decomposition. In *SPIE Astronomical Telescopes+ Instrumentation* (pp. 99055I-99055I). International Society for Optics and Photonics.

Software tools

R (incl. Rmarkdown)
>3 years

Python
1 year

LateX
2 years

**SPSS**

>3 years

Other statistical software

>2 years

Work experience

09/2014 – 05/2017

Self-employed statistical consultant for WO-students

A lot of bachelor's, master's and doctoral students have difficulties with performing their statistical analyses. I function as an adviser, a teacher, a guide or as a co-author for many students.

01/2012 – 05/2012

Teaching assistant University of Utrecht

Courses:

Survey Research: Design, implementation and data processing

Survey Research: Statistical analysis and estimation

Introduction to research methods and statistics for social scientists'

As a student teacher, I am responsible for two things. First, I take care of the practical organization of the courses, that means, I arrange the materials, I answer questions of students, I analyse the student evaluations and I am just around. Second, I assist during lab meetings, I make sure students understand the analyses and are able to perform them correctly. Especially the second part of my tasks gives me joy and gratification.

09/2012 – 02/2013

Blood sampling and collecting at Saltro Diagnostics Center

Driving to patients' homes, sampling the necessary blood and making sure everything is in the lab at the right time was a nice and pleasant job in between two periods of schooling.

Talenkennis

Taal	Woord	Schrift
Engels Nederlands	vloeiend moedertaal	vloeiend moedertaal