Simon **Thornewill von Essen**

DATA SCIENTIST

Bonn/Köln Area

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Education

Data Analysis Nanodegree, UDACITY   *udacity.com, Oct. 2017 - Exp. Feb. 2018*

- Used *Python* and *R* to import and *wrangle* real-world data, perform calculations using industry standard packages (Python: Matplotlib, Pandas, Numpy. R: Dplyr, Ggplot2).
- Learned how to write *SQL* queries including *joins, subqueries and aggregation*.
- Created visualisations for data story-telling using *Tableau.*

Machine Learning A-Z, UDEMY   *udemy.com, Sep. 2017 - Oct 2017*

- Learned how to use *machine learning* algorithms to predict and classify data (Regression, Classification, Clustering, Dimensionality Reduction, Deep Learning, etc.).
- Learned how to use these algorithms in both R and Python (R: Caret, H2o. Python: Scikit-Learn, Scipy, TensorFlow, Keras).
- Used these techniques on data and assessed their performance using *cross-validation* and *confusion matrices*.

Master of Chemistry (M. Chem), THE UNIVERSITY OF EDINBURGH   *Edinburgh, Scotland, Sep. 2012 - May. 2017*

- Learned about the various disciplines of chemistry from synthetic design to quantum mechanics.
- Gave various presentations to groups ranging from 5 to 150 people.
- Communicated feedback from students to the faculty as a class representative about various courses.

PRINCE2 Foundation, THE KNOWLEDGE ACADEMY   *Edinburgh, Scotland, Apr. 2016 - Apr. 2016*

- Gained an understanding of project management to *plan the delivery of business products according to an agreed business case.*

Skills

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Programming	Python, R, Jupyter/R-Markdown Notebooks, Git, SQL, Tableau, Linux/Bash, Java, LaTeX
Machine Learning	Statistics, Regression, Classification, Clustering, Dimensionality Reduction, Deep Learning
Languages	English (Mother Tongue), German (Fluent)

Projects

White Wine Dataset Analysis using R, UDACITY   *Dec. 2017 - Jan. 2018*

- Analysed the chemical components of white wine to predict quality.
- Carried out univariate, bivariate and multivariate analyses in ggplot2.
- Discussed which variables were or were not correlated with quality.

AB-Testing using Python, UDACITY   *Nov. 2017*

- Tested whether a change in website layout created a statistically significant improvement to conversion rate.
- Compared resulting p-value with one derived from a logistic regression.
- Found that the change was not statistically significant in either case and was independent of country.

MChem Research Project, THE UNIVERSITY OF EDINBURGH   *Oct. 2016 - Mar. 2017*

- Researched the sustainable activation of Boronic Esters, designed experiments, and drew conclusions from results.
- Reviewed literature to quickly understand cutting-edge research on various topics and suggested areas for further investigation.
- Learned how to carry out self-driven research individually and as a team.

Experience

Data Science Internship DEUTSCHE POST DHL   *Bonn, Germany June. 2016 - August. 2016*

- Wrote a Python script for invoice/order matching, projected to save the company roughly €7,000 a year. *Currently in production*.
- Assisted in a proof of concept for *data lake in Microsoft Azure* and data catalogue implementation.
- Carried out a *pipeline review* to recommend future projects for the data science team.