LASSE BUUR RASMUSSEN

Bioinformatics Graduate with Data Analysis experience

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SUMMARY

- Graduating as a MSc in Bioinformatics from University of Copenhagen this November. My thesis focuses on the utilization of Natural Language Processing techniques for identifying novel antibiotics. Click for online access to paper + source code
- I have developed my skills in data modelling, analysis and visualization alongside my studies by working as a Data Analyst at RealView A/S for more than 1.5 years. There, I've dealt with statistics of the Danish housing market and its development in recent years.
- I'm interested in the field of deep learning, which I've worked with in several graduate courses as well as my thesis. I'm very excited about the future of the field, and my ambition is to work with deep learning and/or data science.

WORK EXPERIENCE

Student Data Analyst RealView A/S

 \implies Jan '18 – Ongoing ($1\frac{1}{2}$ + years)

♥ Nivå, DK

- Responsible for a handful of projects related to Boligmarkedsstatistikken¹ and E-værdi².
- Retrieve data from servers using SQL.
- Data preprocessing in Pandas.
- Explorative data analysis/Data visualization with Matplotlib and Seaborn
- Assess performance of prediction models and predict troublesome
- Data modelling in Scikit-learn.

Receptionist

Lej Et Lig

Jan '17 - Nov '17

♥ Valby, DK

- Work in a highly stressful environment where multitasking is essential.
- Social skills to interact with people from all walks of life and deal with
- Overcome unanticipated challenges both individually and also working in a team.

Customer Interviewer

RetailWise

Feb '17 - Mar '17

- ♥ Copenhagen, DK
- Approach and interact with various types of people in a warm and non-intimidating manner.
- Ability to not let rejection affect job competency.
 - ¹https://finansdanmark.dk/toerre-tal/boligstatistik/boligmarkedsstatistikken/
 - ²https://www.e-nettet.dk/pengeogrealkreditinstitut/e-vaerdi/

CORE COMPETENCIES

Pandas

NumPy

Sklearn

Python

EDUCATION

MSc Bioinformatics - Thesis grade 12 **University of Copenhagen**

₩ Sep '17 - Nov '19

♀ Copenhagen, DK

- Thesis title: Natural Language Processing (NLP) Techniques for Identifying Bacteriocins. Worked with deep learning and NLP to get hands on experience with state of the art frameworks Keras and TensorFlow.
- Been tuning my degree towards more statistics, programming and data science-related topics.
- Courses include:
 - Advanced Topics in Machine Learning
 - Introduction to Data Science
 - Bayesian Statistics
 - Statistical Causality
 - Linux and Python Programming
 - Statistics for Bioinformatics and eScience

BSc Biochemistry - Thesis grade 12 **University of Copenhagen**

♥ Copenhagen, DK

- Relevant courses:
 - Statistics for Biochemists
 - Discrete Mathematics
 - Physical Chemistry for Biochemists

SOFTWARE SKILLS

Pandas •••• LaTex Linux NumPy •••• Python R 00000 Sklearn •••• Keras SOL

Matplotlib Seaborn Anaconda **TensorFlow Google Cloud**



All skills relative to my skills in Pandas and NumPy

PROJECTS

Implementations of the chemical structural and compositional similarity metric in R and Python Novo Nordisk Foundation Center for Basic Metabolic Research

- Wrote an efficient NumPy/Pandas implementation of an algorithm called *Chemical structural and compositional similarity*.
- Showed that my code is faster than the existing implementation by 2 orders of magnitude.
- My code was used in a **Nature Biotechnology publication** (Bolyen et al. 2019) as well as Brejnrod et al. 2019.

The Human Microbiome and its Interactions with the Immune System - Review

Section of Microbiology - Department of Biology, UCPH

₩ Jun'19

• My review shows that there is a great potential for therapies dealing with diseases and increasing health and wellbeing by targeting the human microbiome.

Click for online access

LANGUAGES

English •••••

DATA SKILLS

- Machine Learning
- Data Analysis
- Data Visualization
- Data Modeling
- Statistics

PUBLICATIONS

Journal Articles

- Bolyen, Evan et al. (2019). "Reproducible, interactive, scalable and extensible microbiome data science using QIIME 2."
 In: Nature biotechnology 37.8, pp. 852-857. ISSN: 1546-1696. DOI: 10.1038/s41587-019-0209-9. URL: http://www.ncbi.nlm.nih.gov/pubmed/31341288.
- Brejnrod, Asker Daniel et al. (2019).
 "Implementations of the chemical structural and compositional similarity metric in R and Python". In: bioRxiv Bioinformatics, pp. 11–14. DOI: 10.1101/546150.