LASSE BUUR RASMUSSEN

Bioinformatics Graduate with Data Analysis experience

@ lasse@lassebuur.dk 📞 +45 30 11 64 93 📍 Rødovre, DK 🔗 lassebuurrasmussen.github.io
in linkedin.com/in/lassebuurrasmussen ⌂ github.com/lassebuurrasmussen

SUMMARY

- Graduated as a MSc in Bioinformatics from University of Copenhagen in November. My thesis focused 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

📅 Jan '18 – Ongoing ($1\frac{1}{2}$+ years) 📍 Nivå, DK

- Image segmentation & classification with deep learning in PyTorch/FastAI.
- Responsible for a handful of projects related to Boligmarkedsstatistikken[1] and E-værdi[2].
- Relational database querying using SQL.
- Data preprocessing in Pandas.
- Explorative data analysis & visualization with Matplotlib and Seaborn.
- Assess performance of prediction models.
- 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 difficult customers.
- 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.

[1] https://finansdanmark.dk/toerre-tal/boligstatistik/boligmarkedsstatistikken/
[2] https://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

📅 Sep '13 – Jul '16 📍 Copenhagen, DK

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

SOFTWARE SKILLS

Pandas	●●●●●	PyTorch	●●●○○
NumPy	●●●●●	LaTex	●●●○○
Python	●●●●○	Linux	●●●○○
Sklearn	●●●●●	R	●●●○○
SQL	●●●○○	Keras	●●●○○

Matplotlib	●●●●○
Seaborn	●●●○○
Google Cloud	●●●○○
Anaconda	●●●○○
TensorFlow	●●○○○

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

📅 Feb 11, '19

- 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

Danish   ●●●●●

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.