



Laura Hartgers

Software Engineer with Machine Learning capabilities

Education

- Apr 2016 - Sep 2019 **Bachelor of Science - Applied Computer Science**, HTW *University of Applied Sciences*, Berlin, *GPA: 1.58 Good, German grading system.*
Focus on Data Science incl. Machine Learning and Neural Networks
- Sep 2005 - Feb 2010 **Bachelor of Health - Nutrition and Dietetics**, HAN *University of Applied Sciences*, Nijmegen, NL, *GPA: 7.1 Good, Dutch grading system.*
- Sep 1999 - Jul 2004 **HAVO - Culture and Society Profile**, EIGENWIJS *High School*, Nijmegen, NL, *GPA: 7.3 Good, Dutch grading system.*

Bachelor's Thesis

- Jun 2019 - Sep 2019 *Finding related documents in knowledge bases*
Supervisors Prof. Dr. Christin Schmidt & Torben Meyer zu Natrup
Description This thesis explores ways to find semantically similar documents to a main document. I utilized an Elasticsearch/BM25 approach as a baseline which I compared to a nearest neighbor search in document embeddings build with language models ELMo and SpaCy.

Computer Skills & Technologies

- Prog. Languages** Python (proficient), Java, \LaTeX , Scala (prior experience), Octave/Matlab, bash, XML, HTML
- Machine Learning** Word Embeddings, Language Models, LSTMs, CNNs, GANs, TensorFlow, SpaCy, NumPy, Pandas, OpenCV etc
- Databases** SQL: PostgreSQL, MySQL & NoSQL: Redis, MongoDB, Cassandra
- Applications** Git, Docker, Elasticsearch, Kibana, Scrapy, Gephi, IntelliJ, PyCharm, Visual Paradigm
- Cloud** AWS, Google Cloud Platform, SAP Cloud Platform
- Miscellaneous** Linux, Clean Code, Agile Methods: Scrum & Extreme Programming, APIs, Microservices, C-Level communication

Work Experience

- May 2021 - present **Machine Learning Engineer (Python)**, MIA MEDICAL INFORMATION ANALYTICS GMBH, Berlin.
Tasks:
- Development of deployable software components while using modern software engineering practices
 - Analysis, design and development of deployable software based on data-driven proof-of-concepts
 - Integration and continuous development of existing software components
 - Research and development in the following domains: data-driven applications, data science, machine learning, deep learning
 - Tight collaboration with data science, development, product and design departments
 - Onboarding of new team members
- Oct 2019 - Apr 2021 **Machine Learning Engineer**, NEOFONIE GMBH & ONTOLUX: KI-AGENTUR FÜR TEXT MINING UND SUCHE, Berlin.
As part of the Research Team, I focused on enhancing search experiences and building text analytics software.
- Develop new software to generate the internal lexicon for TXTWerk based on Wikipedia in $O(n)$: ± 24 h. for the German dataset (± 52 h. English)
 - Reverse engineer Scala code
 - Conceptualize and develop a highly demanded feature which calculates the relevance of identified entities, and integrated this in existing software
 - Showcase NLP and Elasticsearch skills to potential clients and generate insights in our competitors with searchable visualizations by building a web crawler, connecting databases, creating visualizations and dashboards. Incl. building & deploying this in docker containers on a server.
 - Process, analyze and visualize textual data as part of the pre-sales process.
 - Manage and implement the partnership between Neofonie and SAP: Project Management, SAP, SAP Cloud Platform, APIs & communication across two organizations, including C-Level.
- Apr 2019 - Sep 2019 **Intern Data Science & Bachelor's Thesis**, SOPRA STERIA CONSULTING, *DigiLab's AI Team*, Germany.
Research and development of ideas concerning data science techniques, so they can be used to further aid customers of Sopra Steria. I was tasked with semantic search on text data and knowledge bases, leading to insights in strengths and weaknesses of AI and search techniques, and how these can be applied in customer projects.
- Sep 2018 - Sep 2019 **Student member of the examination board**, HTW *University of Applied Sciences*, Berlin.
The examination board is appointed by the faculty committee for each study program and it decides on issues concerning the accreditation and assessments of modules and examinations, special hardship cases, and potential disadvantage compensation.
- Oct 2017 - Mar 2018 **Working Student Software Development**, 4FLOW, Berlin.
Java, agile teamwork with two hundred colleagues worldwide. Contributed e.g. a LoadManager to a large software system for logistics.
- Sep 2004 - Apr 2016 **Miscellaneous roles**, the Netherlands.
In this period I was a self-employed licensed dietitian for two years, and worked in a variety of jobs before I switched to Computer Science.

Further development and training

- 2021 **Continuous Delivery & DevOps**, UNIVERSITY OF VIRGINIA, Coursera
2020 **Deep Learning Specialization**, DEEPLARNING.AI, Coursera

2017 - Present **Meetups about machine learning, data science, software development & engineering:** Tech Talks and Workshops by GOOGLE RESEARCH, BERLIN MACHINE LEARNING GROUP, SOFTWARE CRAFTSMANSHIP, PYLADIES, WOMEN TECHMAKERS & WOMEN WHO CODE, Berlin

2015 **Python Co-Learning**, OPENTECHSCHOOL, Berlin

Languages

Dutch	Advanced fluency	<i>First language</i>
German	Advanced fluency	<i>Native speaker level</i>
English	Intermediate fluency	<i>Conversationally fluent</i>
French	Basic fluency	<i>Basic words and phrases only</i>