Timon Gurcke

Curriculum Vitæ



Address —
Phone —
Email —

Country of Germany

Citizenship

Date of Birth 20.05.1995
Portfolio Kaggle, GitHub

Education

Apr 2018 – Jan 2021 Business Information Systems (M.Sc.)

Paderborn University

Master's Thesis: Assessing the Argument Quality of Persuasive Essays using Neural Text Generation (*Grade: 1.0*)

GPA: 1.2 (Best graduate award)

Oct 2014 - Mar 2018 Business Information Systems (B.Sc.)

Paderborn University

Oct 2016 - Dec 2016 Computer Science (B.Sc.)

University of Helsinki

Sep 2009 - Feb 2012 Bilingual Administrative Assistant (English)

IHK Dortmund

Work Experience

Mar 2021 - Present Research Assistant (Ph.D.)

Paderborn University, Computational Social Science

Argument Summarization and Argument Objectification

Sep 2019 - Mar 2021 Academic graduate assistant

Paderborn University, Computational Social Science

Assisting researchers in the field of Computational Argumentation

Jan 2019 - Aug 2019 Academic graduate assistant

Paderborn University, Data Analytics Group

Research tooling and deployment/administration of machine learning infras-

tructure (e.g., JupyterHub and RStudio on AWS)

Oct 2018 - Dec 2018 Intern in text analytics

Blue Reply GmbH

Creating a prototype application based on SAP HANA: document upload, text extraction, search, preprocessing, clustering and classification of documents

May 2017 - Sep 2018 Working student in business intelligence

Spier GmbH & Co. Fahrzeugwerk KG

Development and implementation of BI concepts including requirement acquisition and validation of data in cooperation with responsible departments and an external consultancy agency

Nov 2015 - Mar 2016 Intern in cash register software

Phoenix Contact GmbH & Co. KG

Creation of a cross-location system description of the cash register software and development of solutions for cost center allocations Competences & Personal Skills

Machine Learning Employment of several core machine learning algorithms using popular frame-

works (e.g. **Pytorch**, Tensorflow, Pytorch Lightning, Sklearn, Pandas)

Text Mining (extraction, classification, relation modeling), Classification, Natural Language **Processing** Language Modeling and Text Generation, as well as extensive experience

using state-of-the-art frameworks (e.g. Huggingface Transformers)

Business Intelligence Experience in creating ETL jobs using SQL and T-SQL, as well as knowledge

of reporting with Microsoft SSRS and SSAS

Operating systems Windows, Linux

Programming languages Python; further knowledge in R, Java, VBA, SQL, HTML5, CSS3, LATEX etc.

> Languages German (native speaker) English (excellent command)

> > Projects

Machine Learning 1st IBM: Quantitative Summarization – Key Point Analysis Shared Task

Top 5% Severstal: Steel Defect Detection (2431 teams)

Top 6% ASHRAE - Great Energy Predictor III (3614 teams)

Top 7% Mechanisms of Action (MoA) Prediction (4373 teams)

Natural Language Aspect-based product sentiment analysis app: automated crawling, topic mod-Processing eling, and sentiment analysis of product reviews

> News media intelligence app: automated crawling, timeline clustering, sentiment analysis and summarization of newspaper articles

Publications

2021 Timon Gurcke, Milad Alshomary and Henning Wachsmuth Assessing the Sufficiency of Arguments through Conclusion Generation Proceedings of the 8th Workshop on Argument Mining. 2021 (link)

2021 Milad Alshomary, Timon Gurcke, Shahbaz Syed, Philipp Heinrich, Maximilian Spliethöver, Philipp Cimiano, Martin Potthast and Henning Wachsmuth Key Point Analysis via Contrastive Learning and Extractive Argument Summarization Assessing the Sufficiency of Arguments through Conclusion Generation (link)

2021 Milad Alshomary, Wei-Fan Chen, Timon Gurcke and Henning Wachsmuth Belief-based Generation of Argumentative Claims Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics 2021 (link)