Curriculum Vitae

Education

2021–2024 PhD, Computer Science, University of Copenhagen

Research Topics: Natural Language Processing, Machine Learning

Advisor: Prof. Anders Søgaard

2018–2020 M.Sc., Computer Science, TU Darmstadt, Cumulative GPA: 1.34*

Focus: Natural Language Processing, Machine Learning, Data Mining, Artificial Intelligence

Subsidiary Subject: Business & Law

Thesis Supervisors: Jonas Pfeiffer, Prof. Iryna Gurevych

2015–2018 **B.Sc., Computer Science**, *DHBW Stuttgart*, *Cumulative GPA: 1.4** ECTS Grade A

*On a scale of 1-5 with 1.0 being the best possible

Publications and Manuscripts

- [1] Constanza Fierro*, Laura Cabello Piqueras*, Jonas F. Lotz*, **Phillip Rust***, Joen Rommedahl, Jeppe Klok Due, Christian Igel, Desmond Elliott, Carsten Bøcker Pedersen, Israfel Salazar, and Anders Søgaard. Date recognition in historical parish records. In *ICFHR* (to appear), 2022.
- [2] Daniel Hershcovich, Stella Frank, Heather Lent, Miryam de Lhoneux, Mostafa Abdou, Stephanie Brandl, Emanuele Bugliarello, Laura Cabello Piqueras, Ilias Chalkidis, Ruixiang Cui, Constanza Fierro, Katerina Margatina, **Phillip Rust**, and Anders Søgaard. Challenges and Strategies in Cross-Cultural NLP. In *ACL*, 2022.
- [3] **Phillip Rust**, Jonas F. Lotz, Emanuele Bugliarello, Elizabeth Salesky, Miryam de Lhoneux, and Desmond Elliott. Language Modelling with Pixels. *arXiv preprint*, 2022.
- [4] **Phillip Rust** and Anders Søgaard. Differential Privacy, Linguistic Fairness, and Training Data Influence: How Much Is Possible in Multilingual Language Models? *WIP preprint*, 2022.
- [5] **Phillip Rust***, Jonas Pfeiffer*, Ivan Vulić, Sebastian Ruder, and Iryna Gurevych. How Good is Your Tokenizer? On the Monolingual Performance of Multilingual Language Models. In *ACL*, 2021.
- [6] Gözde Gül Şahin, Yova Kementchedjhieva, Phillip Rust, and Iryna Gurevych. PuzzLing Machines: A Challenge on Learning From Small Data. In ACL, 2020.

Work Experience

2018–2021 **DualStudy M.Sc. Program**, *DXC Technology*, Frankfurt, Germany

Technical consulting and software development on petabyte-scale data and compute platforms (OpenShift, MapR) for our client, a leading automotive company, to enable autonomous driving research and development.

2015–2018 DualStudy B.Sc. Program, Hewlett Packard Enterprise, Germany/USA

Integrated program that combined studies in computer science at DHBW Stuttgart with six internships in various departments and locations at Hewlett Packard Enterprise and DXC Technology. Included a summer internship in the area of high performance computing research and development with Harumi Kuno at Hewlett Packard Labs in Palo Alto, USA.

Volunteering

2019–2020 AIESEC, Darmstadt, Germany

Volunteering activity mainly consisting of the following components:

- O Preparing foreign students for their professional traineeships in Germany
- O Taking care of the well-being and personal development of trainees in Germany
- O Building and maintaining relationships with companies offering traineeships in the area

Summer/Winter Schools

- 2021 Lisbon Machine Learning Summer School (LxMLS), Virtual
- 2021 Advanced Language Processing Winter School (ALPS), Virtual

Invited Talks

- 2022 Amazon Al, Language Modelling with Pixels, Remote
- 2022 Pioneer Centre for AI, Language Modelling with Pixels, Copenhagen, Denmark

Grants

2022 EuroHPC compute grant, "Pixel Encoding of Language", with Desmond Elliott

Service & Professional Activities

Reviewing: ARR, ACL, EMNLP, MRL @ EMNLP, TiE @ ECCV, TL4NLP @ NeurIPS Program Committee: Workshop for Multilingual Representation Learning (MRL) Organization: Weekly NLP Section Reading Group, University of Copenhagen

Technical Skills

Programming: Python (excellent), Java and JavaScript (intermediate)

ML & NLP Frameworks: PyTorch, HuggingFace Ecosystem, NumPy, NLTK

Miscellaneous: Unix, Slurm, MapR, Kubernetes, Docker, Airflow, Elastic Stack, Ansible

Languages

German (native), English (fluent, TOEFL iBT 112), Japanese (elementary), Danish (elementary)

Personal Interests

Playing football, weightlifting, photography, travelling, playing the piano, cats, coffee