

# Christopher Brix

Student at RWTH Aachen

## Personal Info

### Address

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### LinkedIn

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### Website

<https://www.christopher-brix.de>

## Skills

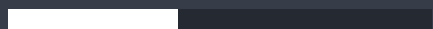
### Python

 Advanced

### C

 Good

### TensorFlow

 Basic

## Languages

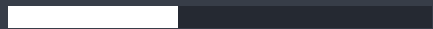
### German

 Mother tongue

### English

 Fluent

### French

 Basic

## References

### GitHub

<https://github.com/ChristopherBrix>

Computer Science student with focus on **natural language processing**. Experienced in machine translation research using neural networks with **2 publications**. Evaluated the performance of a **novel network architecture** (2D-LSTM for NMT) during the bachelor thesis.

## Education

### Apr 2018 - RWTH Aachen, Computer Science, M.Sc.

expected Jul 2020

- Average grade after 2 semesters: 1.6

### Oct 2014 - RWTH Aachen, Computer Science, B.Sc.

Mar 2018

- Bachelor thesis "Extension of the Attention Mechanism in NMT", grade 1.2
- Seminar "Representation Learning", grade 1.3
- Minor in Business Administration
- Graduated with final grade 1.6

## Publications

Oct 2018 Coauthored paper "Towards Two-Dimensional Sequence to Sequence Model in Neural Machine Translation", published in EMNLP 2018

Jun 2017 Coauthored paper "Empirical Investigation of Optimization Algorithms in Neural Machine Translation", published in the PBML

## Experience

### Nov 2016 - Student Research Assistant

present RWTH, Human Language Technology and Pattern Recognition, Professor Ney  
Developed, implemented and evaluated alternatives for the attention mechanism in NMT

- Implemented Theano and TensorFlow support for 2D-LSTM cells using C/CUDA
- Integration into inhouse machine learning framework
- Designed and extended 2D-LSTM to support bidirectional translation

### Jul 2019 LxMLS, Monitor

Will help to organize the Lisbon Machine Learning Summer School, supervise and teach participating students

### Jun 2019 Google NLP summit

- Attended talks of Google researchers about cutting edge NLP technology
- Discussed current open problems and presented our own research ideas
- Total number of accepted attendees: 90

### Jun 2018 LxMLS, Participant

Lisbon Machine Learning Summer School

- Topics: classification, structured prediction of sequences, trees and graphs, parsing, deep learning
- Acceptance rate < 40%

### Apr 2016 - Tutor

Sep 2016 RWTH, Data structures and algorithms

- Weekly training for students, grading of homework and exams
- Topics: Runtime analysis, formal proof of correctness, sorting algorithms

## Honors

2016, 2018 Supported by the scholarship "Deutschlandstipendium"

2016, 2017 Member of the Dean's List

## Additional Projects

### Jan 2016 - Möbelfirst

Jul 2016 Möbelfirst offers an online marketplace for exhibition furniture

- Programming of the online marketplace

### Aug 2012 - Own online business simulation game

Jun 2014

- Project planning and game design
- Guidance and training of the other 2 team members