ONNO EBERHARD, B.Sc.

Machine Learning Student

University of Tübingen

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EDUCATION

M.Sc. **Machine Learning**, *University of Tübingen.*
2020 – 2022 International Master's Program in Machine Learning

B.Sc. **Electrical Engineering and Information Technology**, *University of Duisburg-Essen.*
2016 – 2020 *GPA: 1.6**, *ECTS-Grade: A*, Estimated ranking: ~3.5 / 60 graduates. Thesis: [2] (*Grade: 1.1**)

2018 – 2020 **Computer Science**, *University of Duisburg-Essen.* 90 ECTS points, *GPA: 1.5**

Aug – Dec 2018 **Visiting Student**, *Nanyang Technological University Singapore.* Schools: EEE, CSE.

2016 – 2019 **Vocational Education**, *Siemens Professional Education*, Mülheim an der Ruhr.
IHK Diploma, Apprenticeship as Electronics Technician for Machines and Drive Technology.

2008 – 2016 **Abitur**, *Georg-Büchner-Gymnasium Seelze*, Hanover. GPA: 1.3*, *Best in Maths, Physics, English.*

EXPERIENCE

Many of my personal projects can be seen at https://blog.onnoeberhard.com/projects.

MPI-IS **Research Intern (Reinforcement Learning)**, *Max Planck Institute for Intelligent Systems*, Tübingen.
May 2021 – In the Autonomous Learning group led by Georg Martius, I work on reinforcement learning.

Siemens **Data Scientist (Working Student)**, *Siemens AG*, Mülheim an der Ruhr.
Sep 2017 – I work in an R&D department for operation and control of combined cycle power plants. So far, I have mostly worked on projects for predicting output power and fuel consumption during start-up processes, for which I developed machine learning pipelines using Python. I wrote my Bachelor's thesis [2] on how to apply this approach to new plants lacking historical data.

UDE **Student Research Assistant (NLP)**, *University of Duisburg-Essen.*
Oct 2019 In the Language Technology Lab led by Torsten Zesch, I worked on automatic speech recognition for
– May 2021 low-resource languages and wrote a paper [1] about using transfer learning in this context. Before that, I worked on building a spell checking program specialized on errors from language learners.

May – Aug 2019 **Teaching Assistant (Physics Lab)**, *University of Duisburg-Essen.*

Engineering Internships — Jul 2015 · *Audi AG*, Ingolstadt — Jan 2014 · *Continental AG*, Hanover

Volunteering

RoboCup · 2019 – I work as a volunteer referee at RoboCup Junior events on a national and international level.

2017 – 2020 I worked at my university's student radio station as a volunteer editor. *CampusFM e.V., Essen*

HONOURS & AWARDS

DAAD · 2018 Awarded the *PROMOS* scholarship by the German Academic Exchange Service (DAAD).

UDE · 2017 Awarded the *Deutschlandstipendium* for excellent academic achievements (top ~0.7% of students).

DMV, DPG · 2016 Abiturpreis of both the German Mathematical Society and the German Physical Society.

RoboCup Fed. Second place at the RoboCup World Cup 2012 in Mexico City in the league *Rescue A Primary*,
2010 – 2014 Fourth place at the RoboCup World Cup 2014 in João Pessoa in *Rescue A Secondary (Superteam).*

PUBLICATIONS

2021 [1] O. Eberhard and T. Zesch. "Effects of Layer Freezing on Transferring a Speech Recognition System to Under-resourced Languages". In: *KONVENS 2021*

Preprints & Theses

2021 [2] O. Eberhard. "Data-driven operational forecasts for newly built power plants". Supervised by Steven X. Ding, non-disclosure agreement with Siemens AG. Bachelor's Thesis

SKILLS

Python Very skilled in Python and many of its scientific libraries (*NumPy, PyTorch, SciPy, Scikit-Learn, ...*). I have been using Python professionally since 2017 and have contributed code to the library *pandas*.

Languages I have had separate courses at university on each of the following languages: *Java, C, C++, Haskell, Prolog, Assembly, MATLAB.* I have used all of them (and many more) for personal projects.

Others Comfortable with the Linux / bash command line environment. Skilled in LaTeX.

Languages

German	Native	**French**	Elementary (4 years at school)	**Latin**	Elementary (kleines Latinum)
English	Fluent	**Dutch**	Elementary (self-taught)	**Mandarin**	Elementary (HSK2 certificate)

* *German grade: 1.0 (best) – 4.0 (worst)*