Maximilian Müller

Machine Learning Researcher

- Tübingen and Munich, Germany
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- LinkedIn
- Twitter

Languages

🇩🇪 German	●●●●●
🇬🇧 English	●●●●○
🇪🇸 Spanish	●●●●○

IT Skills

- General Python
- TensorFlow and TF Probability
- Pytorch
- Sklearn
- General R
- SQL
- AWS, AWS IoT, Google Cloud
- Version control with Git
- Docker

Education

PhD Studies

since 2021 **Machine Learning PhD Student** — University of Tübingen, Germany
Safe and reliable ML, Generalization, Optimization. Supervisor: Matthias Hein. Part of the ELLIS program

Master and Bachelor Studies

2018 – 2021 **Master Studies in Physics** — LMU Munich, Germany
Machine Learning for Physics and Plasma Physics

Master Thesis ($\varnothing 1,0$) — Max Planck Institute for Plasma Physics
Topic: Uncertainty quantification with Bayesian Neural Nets for Machine Learning - based fluid simulations

2019 – 2020 **Master Studies in Data Science ($\varnothing 9.6/10$)** — Barcelona GSE, Spain
NLP, Machine Learning theory, Stochastic Optimization and Reinforcement Learning, Bayesian Methods, Sparse Linear Algebra. Highest final grade of my cohort

Master Thesis ($\varnothing 9.5/10$)
Topic: Scalable Inference for Crossed Random Effects Models

2014 – 2018 **Bachelor Studies in Physics ($\varnothing 1,2$)** — LMU Munich, Germany
Focus: Plasma Physics and Medical Physics

Bachelor Thesis ($\varnothing 1,0$) — Max Planck Institute for Plasma Physics
Topic: Simplified Calculation of Electron Cyclotron Current Drive Efficiency in Reactor-size Plasmas

2016 **Exchange Semester** — Universidad Nacional de Colombia
During 4th semester, supported by PROSA LMU scholarship

High School

2005 – 2013 **High School - Abitur ($\varnothing 1,0$)** — Gymnasium Geretsried, Germany
Focus: Physics, Highest final grade of my cohort

Professional Experience

2020 - 2021 **Research Assistant in Bayesian Statistics** — Bocconi University
Development of scalable computational algorithms for Bayesian statistics.

2019 **Junior IT Consultant** — TNG Technology Consulting
Developed and evaluated investing strategies on indices using Python during 3 month internship. Also set up end-to-end architecture for IoT-Showcase using AWS and Typescript.

2018 **Working Student in Optics** — Toptica Photonics AG
Developed experimental setup for doppler-free spectroscopy of iodine in 8 month project.

2018 **Research Internship in Particle Physics** — University of Alberta, Canada
Simulated the Gamma background of a bubble chamber with the C++ based program Geant4.

2016 – 2017 **Teaching Assistant** — LMU Munich
Tutor for undergraduate course about mathematical methods for physics and laboratory supervisor for medical students in their physics laboratories.

Awards and Scholarships

2020 **Master's Thesis selected for BGSE Voice Blog**
As part of the series for exceptional Master's projects (link)

since 2013 **Member of Max Weber Program**
Scholarship for gifted students in Bavaria
Includes soft-skill seminars, summer schools and language courses

2013 **TUM award for seminar thesis**
Visitor jury price for the best poster at students conference

2013 **High School awards in Maths and Physics**