



TOBIAS HÖLZER

Badensche Straße 7 10825 Berlin, Germany

+49 0179 7211 240

tobiashoelzer@hotmail.com

[https://tobiashoelzer.de /](https://tobiashoelzer.de/)

ABOUT ME

I am Tobias Hölzer, a 21 years old, ongoing data scientist. I am focusing my work on climate change and hope to one day combine skills from different fields to help protect the world from climate disasters. I have already worked in many areas of IT and am particularly talented in the development and implementation of full-stack applications. I can follow a machine learning model through its entire life - from idea to research to production. You can visit my portfolio (tobiashoelzer.de) for a showcase of my past work.

EXPERIENCE

AUG 2022 – OKT 2022

INTERNSHIP | IBM – WEATHER COMPANY

Again, I worked on the analysis of forest-health and deforestation in Europe. This time I focussed more on scientific methods analysing the health of specific trees.

OKT 2021 – AUG 2022

DATA ENGINEER | DHBW ENGINEERING

In my last year at the DHBW I was (am) part of the DHBW Engineering. The engineering is a student association which builds a real, electric race car and participates in Formula Student competitions worldwide. There I learned a lot about mechanical and electrical engineering. Besides my main work package, a data engineering tool, I also developed new concepts for the storage of our measurement data, did vehicle dynamics data analysis, wrote a localisation algorithm for the driverless-software and helped my comrades with everyday tasks like the production of carbon parts.

FEB 2022 – APR 2022

INTERNSHIP | IBM – RESEARCH ZURICH

In this internship I wrote my bachelor's thesis about another climate topic: flood-detection. In this work I used computer vision to find floods on remote sensing data with the overall goal to create a larger data set for research in other fields.

AUG 2021 – NOV 2021

INTERNSHIP | IBM – WEATHER COMPANY

I further focussed my work on climate in this internship with the analysis of forest-health and deforestation in Europe. I worked with Big-Data Platforms like IBM Pairs and remote sensing data from the Sentinel programme.

JUN 2021 – AUG 2021

INTERNSHIP | IBM – RESEARCH UK

At the research team in the UK, I worked on the entity-linking-problem, a subtask of natural language processing. There I developed a Python-ML Framework based on Pytorch and proposed a new model-architecture based on the BERT language model. The model is used in a project which helps scientists fight climate change.

NOV 2020 – FEB 2021

INTERNSHIP | IBM – MASTER DATA MANAGEMENT

My Tasks at the MDM developer team were the configuration of CI/CD pipelines for several projects with Docker, K8s and Travis, as well as testing the new IBM Code-Engine service.

JUN 2020 – SEP 2020

INTERNSHIP | IBM WATSON CENTER MUNICH

At the developer team at the IBM Watson Center in Munich I developed a trustful visualization for a swarm intelligence algorithm which can predict potential water leaks in a building. Within this project I also wrote a scientific paper about trustful visualizations.

JAN 2020 – MAR 2020

INTERNSHIP | IBM DIGITAL SALES

In my first Internship at IBM, I developed a data analytics dashboard which uses the IBM Natural Language Processing Services to extract customer needs. I also maintained other NLP Projects.

EDUCATION

OCT 2022

BACHELOR OF SCIENCE | DUALE HOCHSCHULE BADEN-WÜRTTEMBERG

Cooperate Internship at IBM. In germany it's called 'Duales Studium' – Grade: 1.5

JUN 2019

ABITUR | HUMBOLDT GYMNASIUM BERLIN

German Highschool Graduation – Grade: 1.4 - Points: 757 of possible 900

QUALIFICATIONS

- Full-Stack Web-Development
- Docker & Cloud-Development
- Computer Science
- Machine Learning & AI

PROGRAMMING LANGUAGES

- Python
- Rust
- JavaScript
- TypeScript