





Katharina Sternbauer



Student, Data Scientist

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Professional Experience



Data Analyst @Primetals Technologies

 November 2023 - September 2024  Linz, Austria

- DWH engineer to integrate adaptive ETL processes for Data Warehousing.
- Part-time employment, 24h / week





Java Developer @Primetals Technologies

 October 2020 - October 2021, February 2022 - November 2023  Linz, Austria

- Software Engineer for Continuous Casting Machines
- Working with Eclipse SWT and Java to develop software for casting machine design.
- Student employee, part-time, 10-20h / week





Network Technician @Technician at JKU

 October 2021 - February 2022  Linz, Austria

- Responsible at the Institute for Digital Business for hardware maintenance, server and software management, technical assistant for exams.
- Student employee, part-time, 10h / week



Internships Primetals Austria @Primetals Technologies

 August 2019, September 2019, July 2020  Linz, Austria

- Software Engineer for Continuous Casting Machines
- Implementation of smaller software parts for internal software tools to design casting machines
- Internship, full-time

Compulsory internships @Stiwa Group and Technosert

 2014, 2015, 2016  Hagenberg & Pregarten, Austria

- Implementation of backup tools, home automation visualizations and hardware manufacturing
- Internship, full-time

Education



Master of Science in Computer Science @Johannes Kepler Universität

 2021 - Today  Linz, Austria

- Thesis: Adaptive ontology-based ETL processing for Business Intelligence systems
- Major: Data Science
- AVG Grade: <1.3



Bachelor of Science in Computer Science @Johannes Kepler Universität

 2018 - 2022  Linz, Austria

- Thesis: Performance Evaluation of the LMS/HSS hash-based signature system
- Passed with distinction

High Technical College (HTL) @Linzer Technikum Paul-Hahn-Straße

 2012 - 2017  Linz, Austria

- Matura: Passed with distinction
- All years passed with distinction / flying colours

Featured Projects



Passion for technology @Personal

⌚ 2011 - Never ending

- Building my own PCs, which started my interest in Computer Science
- 3D design and printing since 2020
- Self-assembled and configured NAS-system on Ubuntu Server with LVM, Raid, Samba, DLNA
- Tech editor for German portal tech-review.de from 2014 until 2024
- Laying patch cables everywhere to ensure sufficient network coverage
- Student dorm network admin team from 2021 to 2024
- Raspberry Pi as a network DNS guard with Kodi installed for TV entertainment



Ear Spoof Detection Neural Network @University Project

⌚ 2023 📍 JKU

- As my master project, based on a seminar work, I implemented a neural network which can distinguish genuine biometric identifiers from fakes
- The network is trained to detect spoofed data for biometric ear identification
- Python, PyTorch, Kaggle



Personal Webpage @Personal

⌚ 2022 - Today

- The source for my webpage is also freely available. It uses Bootstrap 5, directly loaded from a CDN, as its CSS framework and utilizes very little custom CSS and JavaScript for some smaller refinements.
- HTML, CSS, Javascript



AirBnB Barcelona Visualization @University Group Project

⌚ 2022 📍 JKU

- As part of the exercise track of “Visual Analytics” at JKU, we had to take a deep dive into data analysis including static plotting, correlation and getting new insights with techniques such as PCA and clustering.
- Implemented various statistical methods to assess the different pricing of AirBnB rooms in Barcelona
- Integrated Python libraries for visualization of geographical locations, graphs and plots
- Python, Jupyter Lab, Geopandas



Raspi soil moisture detector @University Group Project

⌚ 2019 📍 JKU

- As part of the exercise track of “Embedded and Pervasive System” at JKU, we implemented an detection and alarm system for your beloved plants which monitors the soils moisture levels and saves the data into a simple database
- Implemented two python programs on Raspberry Pis to communicate via MQTT with each other and pass sensor data.
- Integrated web page to view the soil moisture and room temperature over time.
- Python, Shell, SQL

Skills & Interests

Technology

Data Science

PC Hardware

3D printing & design

Data Warehousing

Scripting

Languages

German (native)

English (fluent)

Java

Kotlin

Rust (beginner)

C (basics)

SQL

Python (can plot pretty diagrams)

C# (fundamentals)

Shell

Sports

Boulder

Badminton

Volleyball

Fistball

Interests

Reading

Music

Guitar

Politics

Social topics

PC-related tech

Cryptography

Internet of Things