Katharina Sternbauer

Student, Data Scientist

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Professional Experience

Medical IT @Red Cross Upper Austria
 January 2025 - Now   Linz, Austria)

- Medical IT with a focus on Data Warehouse, Tableau, Electronic Content Management
- Maintaining older software pieces and bringing them up-to-date
- Part-time employment, 24-35h / week

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, Stiwa Group and Technosert
 2014, 2015, 2016, 2019, 2020   Linz - Hagenberg - Pregarten, Austria

Education

Master of Science in Computer Science @Johannes Kepler Universität
 2021 - 2025   Linz, Austria

- Thesis: Adaptive ETL processing for Business Intelligence applications with Data Warehouses
- Major: Data Science
- Graduation certificate: Straight A's

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 Docker host, network DNS guard, DNS-Updater service, GraphDBs

Adaptive ETL processing for Business Intelligence applications with Data Warehouses @Master Thesis
⧗ 2023   📍 JKU

- My master thesis, based on the concept of automated code generation based on semantic, ontological data
- Java, MSSQL, Typst
- Publication: https://epub.jku.at/obvulihs/content/titleinfo/11591465

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, Javscript

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

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						