

FABIAN WENZ

Master of Mathematics in Data Science

✉ fabian@wenz.org
🐙 gitlab.lrz.de

✉ Stahlstraße 38, 81247 Munich

📍 Munich , Germany

🌐 fabian-wenz



EXPERIENCE

Working Student C++ Database Engineer

Celonis

📅 Sep 2022 – Mar 2024

- Develop and implement new, innovative features and algorithms for celonis' query engine in C++, Java and Python
- Increase the reliability and performance of existing components of celonis' query engine
- Collaborate with various teams and coworkers to drive innovation in the field of process mining

Working Student as Data Scientist in Fixed Income

Amundi S.A.

📅 Jul 2021 – Mar 2022

- visualization of fond-mandates
- implementation of an automated monthly report-generator interacting with large data-sets in Python and MySQL

Intern & Working Student as Data Scientist in Tax, Technology and Transformation

Ernst & Young GmbH

📅 Nov 2019 – Jul 2020

- implementation of a web-crawler in Python in the pharmaceutic field for identifying newly added or changed regulations
- developing an automatic email-newsletter
- developing web-based applications in the tax field for calculations and visualizations in Power Bi
- developing a Desktop-application in Python in sharebased salary

Student Assistant

Technical University of Munich

📅 Feb 2019 – Jul 2019

- tutor advanced mathematics
- tutor introductory mathematics (Sep-Oct 2018, Sep-Oct 2020, Apr-Sept 2022)
- \LaTeX -scripting
- exam-corrector

Internship Software development

BMW Group

📅 Mar 2018 – Sep 2018

- implementation of an optimization algorithms for generating realistic load cases for virtual concept-evaluations
- developing an automated script in Lua and Python for calculating strain cases of the manual montage of flexible car-components

STRENGTHS

Persistent

Logical-thinking

Detail-driven

Algorithms

Optimization

Efficiency

Data Structures

AI

LANGUAGES

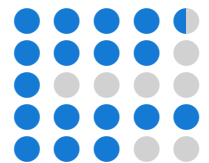
English (C1)

Italian (B2)

Chinese (A1.1)

German (C2)

Latin (Big Latinum)



EDUCATION

Master Thesis: Leveraging LLMs for Querying Large Datawarehouses: A New Paradigm

[Massachusetts Institute of Technology](#)

📅 April 2021 – Oct 2024

M.Sc. in Mathematics in Data Science

[Technical University of Munich](#)

📅 Oct 2021 – Mar 2025

B.Sc. in Computer Science

[Technical University of Munich](#)

📅 Oct 2018 – Sep 2021

Thesis: An Experimental Evaluation of Heuristics for Constructing Hierarchical Cut Sparsifiers

B.Sc. in Mathematics

[Technical University of Munich](#)

📅 Oct 2014 – Sep 2018

Thesis: Mathematical Models of Biological Processes in Nephrons

University Entrance Qualification

[Louise-Schoeder-Gymnasium](#)

📅 Sep 2006 – Jul 2014

PUBLICATIONS

Mind the Data Gap: Bridging LLMs to Enterprise Data Integration

📅 19-22 Jan 2025

(coming soon at CIDR)

BEAVER: An Enterprise Benchmark for Text-to-SQL

📅 3 Sep 2024

✂ abs/2409.02038

Making LLMs Work for Enterprise Data Tasks

📅 22 Jul 2024

✂ abs/2407.20256

PROJECTS

ChainReaction

👤 Contest

Programminglanguage: Haskell

🌐 vmnipkow16.in.tum.de/christmas2020-finals/

Physic Games Engine

📄 University

Programminglanguage: C++

🔗 <https://gitlab.lrz.de/ga78huf/gamephysics>

Space Invaders

📄 University

Programminglanguage: Java

🔗 <https://gitlab.lrz.de/ga78huf/spaceinvaders>

Cut-Sparsifier

📄 Bachelor-Thesis

Programminglanguage: C++

🔗 gitlab.lrz.de/ga78huf/BachelorarbeitInformatik

SIR-Modell

📄 University

Programminglanguage: C++

🔗 (cumpulsory private Repository)

Query Contest

👤 Contest

Programminglanguage: C++

🔗 gitlab.db.in.tum.de/ga78huf/fde21-bonusproject-1

COMPUTER-KNOWLEDGE

C++



Haskell,
Java, MySQL, Python



Matlab, Git, Linux, L^AT_EX



Lua, Adobe
(Photoshop, Illustrator)



Microsoft Office
(Word, Excel, PowerPoint)



PowerBi



REFEREES

PD. Andreas Johann

@ Chair for Advanced Mathematics and Analytical Mechanics (TUM)

✉ johann@ma.tum.de

Prof. Michael Stonebraker

@ Computer Science and Artificial Intelligence Laboratory (MIT)

✉ stonebraker@csail.mit.edu

Felix Weiß

@ Celonis

✉ f.weiss@celonis.de

Tugrul Kolad

@ Amundi

✉ tugrul.kolad@amundi.com

David Lappe

@ (former) Ernst & Young GmbH

✉ davidlappe@gmx.de

Bernhard Wolf

@ BMW Group

✉ bernhard.wb.wolf@bmw.de