

MARKUS KÖFLER

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Education

Vienna University of Technology

MSc Data Science

Oct 2023 – Present

Vienna, Austria

University of Illinois at Urbana-Champaign

Exchange Semester (GPA: 3.87/4)

Jan 2022 – Jun 2022

Illinois, USA

- **Relevant Coursework:** Python for Data Science, Intro. to Computer Science, Statistics, Leadership & Entrepreneurship
- Joint-Study Scholarship (worth \$19,200)
- Activities: Joined YMCA & Flipping Illini, participated in meetings of local Rotary Club

University of Klagenfurt

BSc International Business & Economics (Grade Average: 1.29/5)

Oct 2020 – Jul 2023

Klagenfurt, Austria

- **Bachelor Thesis:** [Construction of Annual Data Sets for the Econometric Analysis of Long-Run Money Demand](#)
 - ◇ Participated in a funded research project from the Department of Economics by searching, adjusting and adding 124 time-series of selected economic variables to a large data collection.
 - ◇ Applied temporal aggregation & splicing techniques. Developed an imputation algorithm written in Python.
- **Relevant Coursework:** Deep Learning, AI & Machine Learning, Python, Econometrics, Data Analytics
- 3 × Merit Scholarship

Technical Skills

Programming & Markup Languages: Python 3, R, Java 8, SQL, Git, Bash, MiniZinc, L^AT_EX, Markdown, HTML

Libraries: TensorFlow/Keras, Pytorch, Scikit-Learn, Pandas, NumPy, Matplotlib & Seaborn, OpenCV, Tidyverse, GGplot

Software & Tools: Jupyter & Google Colab, Docker, Tableau, GitHub, Excel, Google Suite, DB2, Big-Query

Experience

uniforce Consulting

Consultant

Aug 2023 – Present

Vienna, Austria

- Currently leading a taskforce consisting of 12 club members for the upcoming recruiting phase in October.
- Performed data analysis on club member data from the internal Podio database with Python and Excel.

University of Klagenfurt

Tutor for Econometrics & Programming in R

Oct 2022 – Jan 2023

Klagenfurt, Austria

- Helped improving the grade average from 4.1 to 3.21 and the failing rate from 22% to 10% compared to previous year.
- Hold weekly tutorials for 40+ students. Demonstrated practical examples with R notebooks complementing the lecture.
- Content: Multiple Linear Regression, BLUE Criteria & Quality of Estimator, Hypothesis Testing, Pooled and Panel Data Models, Visualization, Statistical Modeling & Monte Carlo Simulations

Raiffeisen Landesbank

Office Assistant

Aug 2021

Klagenfurt, Austria

- Organized customer data with Excel. Implemented nested conditionals, pivot tables, filtering & sorting techniques.

Portfolio Projects & Extra-Curricular Activities

Skin Cancer Classification | *Python, Google Colab, TensorFlow/Keras, [GitHub](#)*

Jun 2023

- Comparison of VGG16-inspired CNNs with and without soft-attention mechanism on dermoscopic skin lesion images.
- Achieved on average a 1.5% improvement in F1-scores by implementing soft-attention module.

Bitcoin Price Forecast & Price Scraper | *Python, Google Colab, TensorFlow, Scikit-Learn, R, [GitHub](#)*

Feb 2023

- Comparing Long Short-Term Memory model to a simple regression model as the benchmark. Training and predictions have been carried out in a recursive manner using the moving window technique.
- Real-time Bitcoin price scraper tool using several methods.

Open-Sourced Exercise Repositories | *Python, R, [GitHub](#)*

Oct 2022 – Jun 2023

- Open-sourced proposed code solutions and pre-processed data sets to home exercises in Data Analytics, Econometrics and Macroeconomics for fellow students and offered guidance with follow-up questions.

US Flight Delay Analysis | *R, RStudio, SQL, [GitHub](#)*

Sep 2022

- Data engineering and exploratory analysis using R and SQL-queries. Project aimed towards implementing and demonstrating skills acquired from the Google Data Analytics Certificate Course.

Certifications

Coursera: [IBM Databases \(SQL and Python\)](#), [Google Professional Data Analytics](#), [The Nuts and Bolts of Machine Learning](#)

DataCamp: [Building Pipelines with Docker](#), [Intermediate SQL](#), [Introduction to R](#)