Markus Köfler (22 years old)

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Experience

BAWAG Group AG
[20h p/w] **Nov 2023 – Apr 2024**

Data Scientist/Analyst Intern for Strategic Initiatives & Marketing — *Vienna, Austria*

- Developed various marketing-mix models to analyze the impact of increasing ad spend on key performance indicators like conversions, impressions, and clicks. Translated key findings into actionable recommendations for optimizing budget allocation, delivering presentations to both team members and management.
- Applied data engineering principles (ETL) to establish automated pipelines hosted on Apache Airflow to retrieve, transform and store daily marketing campaign data from Meta platforms and Google DV360 into a Snowflake database by implementing the dedicated APIs in Python.
- Wrote advanced SQL-queries to investigate customer attribution with the help of visualizations in Python, R and Power BI.

University of Klagenfurt
[10h p/w] **Oct 2022 – Jan 2023**

Tutor for Econometrics & Programming in R — *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
[40h p/w] **Aug 2021**

Office Assistant — *Klagenfurt, Austria*

- Organized customer data and thereby acquired advanced Excel skills.

Education

Vienna University of Technology
Oct 2023 – Present

MSc Data Science — *Vienna, Austria*

- Relevant Coursework: Data-Oriented Programming Paradigms, Experimental Design for Data Science
- e-fellow.net Scholarship

University of Illinois at Urbana-Champaign
Jan 2022 – Jun 2022

Exchange Semester (GPA: 3.87/4) — *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
Oct 2020 – Jul 2023

BSc International Business & Economics (Grade Average: 1.26/5) — *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, Finance
- 3 × Merit Scholarship

Technical Skills

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

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

Software & Tools: Jupyter, Apache Airflow, Snowflake, Docker, Power BI, Tableau, GitHub, Excel, Google Suite

Languages & Soft Skills

Languages: English (C1 - full working proficiency), German (native), Italian (B1 - intermediate), Slovak (beginner)

Soft Skills: Communication within a team, Accountability, Reliability, Motivated, Willingness to learn new technologies

Portfolio Projects

Chicago AirBnB Market Exploration | *Python, Kaggle, Git, Scikit-Learn, XGBoost, GitHub*   **Nov 2023 - Jan 2024**
- Collaboration project in exploring and modelling several public datasets to gain insights into the AirBnB market in Chicago and its biggest price drivers.

Skin Cancer Classification | *Python, Google Colab, TensorFlow/Keras, GitHub*   **Jun 2023**
- Comparison of VGG16-inspired CNNs with and without soft-attention mechanism on dermatoscopic skin lesion images.
- Achieved on average a 1.5% improvement in F1-scores by implementing soft-attention module.

Bitcoin Price Forecast & Price Scraper | *Python, Kaggle, 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 xpaths.

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

Volunteering & Extra-Curricular Activities

uniforce Consulting   **Aug 2023 – Present**

Consultant   *Vienna, Austria*
- Mentored junior consultants with their first projects.
- Lead a taskforce consisting of 12 club members for the past recruiting phase in October 2023 through which we grew our team from 3 to 10 active members at the office in Klagenfurt.
- Performed data analysis on club member data from the internal Podio database with Python and Excel.
- Organization of recruiting events, coordination of marketing initiatives, and approaching decision makers for sponsorings and support.

Huawei Seeds for the Future Programme   **Sept 2023**

Participant in Student Competition & Mentoring Program   *Vienna, Austria*
- Within the two-week program, I joined a team of IT-students to ideate and establish an ESG-compliant business model to then compete against other teams on an international level.
- Lectures, talks and team events on cutting edge technologies including 5G, AI, Cloud Computing and Digitalization.

Austrian Military   **Oct 2020 – Apr 2021**

Mandatory Military Service   *Spittal an der Drau, Austria*

Graduation Prom Committee   **Mar 2019 – Nov 2019**

Board of Directors and Treasurer   *Spittal an der Drau, Austria*
- Negotiated a fair, performance-based allocation of profits among contributors.
- Collected sponsorings of over 2200€ by approaching local firms and Supervised revenues of +30000€.

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

Huawei: Seeds for the Future Program 2023-2024