Maximilian Kuttner

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EXPERIENCE

Trading Systems Engineer, Oepfelbaum IT Management AG Zürich, CH — Feb 2026 – Present

Optimising trading system infrastructure for Swiss financial institutions.

- Automation, code migration and testing for Front Arena Upgrade (Python, Jenkins)
- Improved OTC trade ingestion into Front Arena, reducing downstream processing time
- Built Python analysis and visualisation tools for trading system monitoring and trade analytics (Dash)
- Developed an interactive order book and execution algorithm simulator to demonstrate trading strategies and execution performance to prospective clients (Python, JavaScript).

Asset Management Platform Engineer, Zürcher Kantonalbank Zürich, CH — Sept 2023 – Dec 2025

Contributed to the development of a proprietary Portfolio Management Platform, working on various components to enhance functionality and increase performance for +100 users.

- Developed scalable portfolio analytics service in Python (Flask, Protobuf, Arrow, Polars)
- Built critical ETL pipelines for 4 newly launched ETFs (Python, SQL)
- Built data infrastructure for backend services and client applications (Databases, SQL)
- Developed user interfaces for ETF flow and composition analysis (C#/.NET)
- Built deployment automation and managed Linux infrastructure (Bash, RedHat, Ansible)

Intern in Derivatives Trading, Allianz Global Investors Frankfurt am Main, DE — Jul 2021 – Sept 2021

Contributed to the development of an in-house trade execution engine.

- Developed order routing algorithms for the internal derivatives trading engine (Python)
- Built market trend forecasting models using neural networks and analysed order-book data to aid the optimal choice of execution algorithms (Python, Tensorflow)

Intern in Risk Models & Calculations, Commerzbank AG Frankfurt am Main, DE — Apr 2020 – Aug 2020

- Developed data quality controls for credit rating models (SQL)
- Statistical analysis of rating-relevant data (SQL, Python)

Intern in Risk Management, Erste Asset Management GmbH Vienna, AT — Jul 2019 – Sept 2019

- Developed dashboards and scripts in R to monitor portfolio constraint violations

EDUCATION

University College Dublin Data and Computational Science (MSc.) — Sept 2022 – Sept 2023

GPA: 4.08 (4.2 best - 0 worst) • Dublin, IRE

- First Class Honours
- Final Project: " Deep Recurrent Factor Models and layer-wise relevance propagation for deep LSTM networks"

Vienna University of Economics and Business Quantitative Finance (MSc.) — Sept 2020 – Aug 2022

GPA: 1.23 (1 best - 5 worst) • Vienna, AT

- First Class Honours, Ranked top 3 out of a cohort of 92 students
- Research Track: additional modules in reading and writing scientific papers in quantitative finance
- Thesis: " Markov Switching GARCH Models with Time-Varying Transition Distributions applied to High-Frequency Equity Returns"

WU - Vienna University of Economics and Business Business, Economics & Social Sciences (BSc.) Sept 2016 – May 2020

GPA: 1.87 (1 best - 5 worst) • Vienna, AT

- Major in Finance & Mathematics
- Thesis / Industry Project: Designed and implemented a risk monitoring and visualisation application for Erste Asset Management to track portfolio constraint violations and support risk oversight.

PROJECTS

OpenOMS

Building a multi-client order management system for electronic trading, including order routing, APIs, persistence and event-driven messaging (Rust, PostgreSQL, Kafka)

MSGARCH

Implemented time-varying transition probabilities in a fork of the MSGARCH package in R/C++

LRP for Deep Recurrent Factor Models

Implemented layerwise relevance propagation for deep recurrent neural networks compatible with the Tensorflow API and tested it on US stock returns

CERTIFICATIONS

SIX Trader License Aug 2026
SIX

Front Arena Boarding Pass Jun 2026
FIS

Red Hat System Administration I Jul 2025
RedHat

C++ Programming for Financial Engineering Sept 2018
Baruch College / QuantNet

LANGUAGES

German	English	Russian
Native speaker	C2	A2

SKILLS

Linux	**Financial Mathematics**	**Machine Learning**	**Data Science**
Data Engineering	**DevOps**	**APIs and Services**	**Data Visualisations**
C/C++	**Python**	**R**	**C#**
Rust			

INTERESTS

Learning new (programming) languages	**Skiing**	**Running**	**Badminton**