

Curriculum Vitae

Niklas Walter

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Professional Experience

08/2024 – today	QuantCo, Munich Data Scientist/Researcher • Development and deployment of GLM/GBM models for predictive modelling for clients the insurance sector • Predictions for future claim costs and cancellation probability for pricing and client value models • Full stack data science including database engineering, model design and deployment
07/2020 – 09/2020	NatWest Markets PLC, London Internship - <i>Quantitative Analyst, Flow Rates Trading</i> • Development of a Python-based statistical regression tool on LIBOR swap rates of different maturities and currencies with the superordinate goal of finding statistical arbitrage which was evaluated by analyzing the timeseries of the generated alpha • During my project I worked within the Quantitative Analytics team closely collaborating with the swap trading desk
03/2019 – 05/2019	PricewatershouseCoopers GmbH, Frankfurt/Main Internship – <i>Financial Risk Advisory, xVA and Derivative Pricing</i> • Development of a Quant-Lib based valuation tool for interest rate swaps, one currency basis swaps and cross-currency swaps • Implementation of Monte Carlo simulations of exposure profiles using the software "Adaptive Analytics" and support in the derivation of add-ons for the quantification of counterparty risks as part of a client project
03/2018 – 04/2018	IQVIA Commercial GmbH & Co. OHG, Frankfurt/Main Internship - <i>Client Service Subnational</i> • Data documentation by means of Excel and execution of physician sample orders for clients in the pharmaceutical sector • Creation of sales-trend- and expense-based forecasts in the pharmaceutical sector for effective market penetration and medium-term resource planning
05/2016 – 07/2016	Deloitte Consulting GmbH, Frankfurt/Main Internship - <i>Innovation Management (Deloitte Consulting Incubation)</i> • Preparation, storyboarding and development of PPT-based presentations on topics as future of work, innovation ethics and digital business models • Conducting competitive analyses and research tasks

Academic Education

11/2020 – 07/2024	Ludwig-Maximilian-University of Munich Ph.D. Student in Mathematics - Research Topics: Deep Generative Models for Financial Time Series, Rough Volatility Models, Mathematical Foundation of Deep Learning - Supervisors: Prof. F. Biagini (LMU) and Prof. L. Gonon (Imperial College London)
09/2019 – 09/2020	Imperial College London M.Sc. Mathematics and Finance – Grade: First Class Honours (distinction) - Master's Thesis: „Contagious Jump-Diffusion Model for Credit Risk“ – Grade: Distinction - Stochastic Processes, Statistical Methods, Stochastic Control, Algorithmic and High-Frequency Trading, Convex Optimisation, Quant. Risk Management, Option Pricing Theory
10/2016 – 09/2019	Ludwig-Maximilian-University of Munich B.Sc. (Business) Mathematics – Grade: 1.2 (excellent) - Bachelor's Thesis: „Utility Maximization under Model Uncertainty“ – Grade: 1.0 (excellent) - Calculus, Linear Algebra, Stochastics, Probability Theory, Differential Equations, Numerical Methods, Econometrics

IT Expertise

Python	Pandas, Scikit-Learn, PyTorch, DuckDB, LightGBM, Altair, SQLAlchemy, Dask
Database/ Cloud Services	AWS S3, Db2

Language Skills

German	Native speaker
English	Highly proficient in spoken and written English
Latin	Latin proficiency certificate

Scholarships & Awards

04/2019 - today	(Alumnus of the) Max Weber Scholarship of the Elite Network of Bavaria Program for particularly gifted high-school graduates and students who wish to study or are already enrolled at a Bavarian higher-education institution
06/2015	Abitur Award 2015 from the DMV (German association of mathematicians) Every year DMV awards graduating high school students for outstanding achievements in mathematics

Extracurricular Activities & Personal Interests

2020 – today	Co-Founder of the Data Science Association Munich
2022 – today	Co-Founder and tutor in the “Quant Finance Preparation Class”
General	Tennis (14 years as an active player and 3 years as a coach) , running (Marathon Munich 2021), hiking, skiing, playing the piano, boardgames