# Dr. Christian Groll

#### Chief Investment Officer

Data Scientist with 7+ years of experience in building data-intensive applications to automate business processes and create data driven products and services. Proficient in machine learning, deep learning and data and software engineering best practices. Capable of designing, developing, testing and deploying scalable applications. Dedicated to lifelong learning and putting data science to good use.



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github.com/cgroll

# **SKILLS**

Machine learning

Deep learning

Data engineering

MLOps

Optimization

Financial econometrics

### **LANGUAGES**

German

Full Professional Proficiency

English

Full Professional Proficiency

#### **WORK EXPERIENCE**

# CIO (previously Head of Quantitative Investment Strategy) Scalable GmbH

10/2015 - Present

Munich, Germany

Digital wealth manager, neo broker

Achievements/Tasks

- Developed fully automated **machine learning trading strategies** managing > 2bn EUR.
- Created a deep learning NLP model for the automated classification of client emails.
- Implemented a discovery engine based on collaborative filtering to help retail clients make better investment decisions matching their individual preferences.
- Created a shift planning tool to optimize scheduling of employee shifts in line with employee preferences and constraints to ensure achievement of service level agreements.
- Designed a market data and risk metrics data warehouse for automated data explorations.
- Helped grow a data centric company identity by giving company-wide presentations about AI
  and quantitative investing and contributing to the company research blog and whitepaper.

# **Research Assistant** Ludwig-Maximilians-University Munich

05/2011 - 04/2017

Munich, Germany

Chair of financial econometrics

Achievements/Tasks

- Doctoral Thesis: Dynamic risk management of multi-asset portfolios
- Research topics: risk management, asset management, quantitative finance, dynamic factor models, modeling of dependence structures

### **TECHNICAL EXPERIENCE**

Programming languages: Python, Matlab, Julia, R

ML / AI: Sklearn, Pytorch, Tensorflow, Huggingface

AWS Services: Sagemaker, Lambda, Athena, Fargate, CodePipeline, ECR

CI/CD, agile: git, github actions, docker, jenkins, JIRA, Confluence

Data / data engineering: Airflow, MySQL, DVC, Parquet, Spark, HDF5

Visualizations: Jupyter, Plotly, Dash, Metabase, Streamlit, D3.js

Content: Jekyll, Pandoc, LaTeX, HTML, Contentful, Gatsby

#### **EDUCATION**

# **Doctor of Natural Sciences (Statistics / Financial Econometrics)**Ludwig-Maximilians-University Munich

2011 - 2018

**Diploma in Financial Mathematics (Grade: 1.3)** Ludwig-Maximilians-University Munich

2004 - 2011

## **INTERESTS**

Digital art Travel

Geographic information

Al Piano

Football

systems