

# Christian Groll

## Chief Investment Officer

Data Scientist with 7+ years of experience in building data-intensive applications to automate business processes, improve decision making and create innovative and data driven products. Proficient in machine learning, deep learning and data and software engineering best practices. Capable of designing, developing, testing, and deploying scalable services. 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

## INTERESTS

Digital art

Travel

Geographic information systems

AI

Piano

Football

## WORK EXPERIENCE

### Head of Quantitative Investment Strategy / CIO 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

- 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

### PhD Statistics / Financial Econometrics Ludwig-Maximilians-University Munich

2011 - 2018

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

2004 - 2011