

Personal Statement

With extensive experience in collaborating with international teams on strategic and quantitative projects across Europe and Asia, I combine a unique blend of training in both economics and physics. I excel in translating complex technical and market analyses into actionable strategies, demonstrating my ability to navigate challenging business environments and deliver results. Eager to leverage my cross-disciplinary expertise in consulting, I aim to drive value for clients and help them achieve their long-term objectives.

Experience

- 10/23 – **Centre for Quantum Technologies** *National University of Singapore & Yale-NUS College* – Thesis Researcher
09/24
 - Improving noise resilience of operations in quantum computers with AI techniques (Reinforcement Learning)
- 06/22 – **BlackRock** *Portfolio Analytics Group, Budapest, Hungary* – Summer Analyst
08/22
 - Developed risk dashboard to automatically flag data inconsistencies between firm-wide and client databases across portfolios, using Python & SQL for data validation and integrated solution into a nightly update routine
 - Built an evaluation pipeline to validate a new multi-asset multi-factor financial model by comparing its outputs to a previous model, enhancing data collection efficiency by 60% through infrastructure improvements
- 03/22 – **Roland Berger** *Restructuring, Performance, Transformation & Transaction, Munich, Germany* – Graduate Intern
06/22
 - Communicated with executive board and managed the data room for distressed sell-side mandate in the chemicals sector, prepared 12 investor proposals and analysed deal structures for a €100m+ transaction
 - Conducted competitor analysis and interviewed 3 industry experts in a buy-side Commercial Due Diligence project, evaluating market trends and competitive positioning for a software company acquisition
- 10/21 – **KPMG** *Financial Risk & Treasury, Munich, Germany* – Intern
12/21
 - Developed a treasury dashboard in PowerBI, integrating Python-based web scraping and Google News API to analyze real-time market data, including sentiment analysis (NLP) of news articles on 15 counterparties
 - Presented project results to entire German Treasury practice (>60 FTE, including partners) in a nationwide call and gave a live demo to 2 clients, driving interest in advanced data-driven risk management solutions

Education (GPA out of 4.0)

- 09/24 – **Chinese Language Scholar** *Shanghai Jiao Tong University, Shanghai, People's Republic of China*
01/25
 - Full-time semester program for Chinese language and culture; Personal Goal: Achieve HSK 5 (equiv. B2-C1)
- 09/22 – **Exchange Year** *National Taiwan University, Taipei, Republic of China* – (GPA: 4.0)
06/23
 - Focus: Quantum Computing, High-Performance Computing, Artificial Intelligence, Chinese Language
- 04/21 – **MSc Physics and Management & MSc Physics (Double Degree)** *Ulm University, Ulm, Germany* – (current GPA: 3.9)
09/24
 - Focus: Quantum Computing, Financial Modeling, Business Analytics (projects in R & Python)
- 10/17 – **BSc Physics and Management** *Ulm University, Ulm, Germany*
03/21
 - Focus: Statistical Mechanics, Business Analytics; Thesis on NV Centre dynamics (Matlab; grade: 3.7)

Technical Projects

- 01/24 – **Multivariate Bicycle Codes** *Research Project with A*STAR Singapore & TII Abu Dhabi* – Link to publication
06/24
 - Introduced new class of Quantum Error Correction codes improving encoding efficiency (Python – OOP)
- 02/23 – **Study on Deep Learning Training with NVIDIA GPU HPC & AI** *class final project at National Taiwan University*
06/23
 - Benchmark data and model parallelization on a GPU against CPU-based approaches (Python, CUDA)

Leadership & Achievements

- 12/23 – **Organizer** *Singapore Quantum Technologies Meetup Group*
09/24
 - Organizing regular sessions for quantum enthusiasts hosting speakers from industry & academia
- 09/22 – **Baden-Württemberg Scholar & Regional Lead Taiwan** *Baden-Württemberg Foundation*
06/23
 - Responsible for organizing network and cultural activities among scholarship holders in Taiwan
 - Raised >15,000 EUR funding for my academic stays in Singapore and Taiwan
- 08/21 – **President** *German Entrepreneur Prize for Students Alumni Association*
today
 - Leading a team of four, overseeing the budget, planning networking and career development events
- 06/16 **2nd in Nationwide Business Plan Competition** *German Entrepreneur Prize for Students*

Skills & Interests

- Languages German (native), English (full working proficiency), Mandarin Chinese (est. HSK 4, equiv. B1-2), French (est. B1)
- Coding Python (proficient); R, Matlab (intermediate); SQL, Bash, Git (basic)
- Technologies MS Office suite, LaTeX, Cloud Computing (AWS, Google Cloud), HPC Clusters
- Interests Swimming, tennis, cooking haute-cuisine, language tandems