

Education

- 04/2022** **Ludwig-Maximilians-Universität-Munich** *Doctoral Researcher*
- Research area: Systemic risk, default propagation in networks and machine learning
 - Current project: Scenario based capital allocation to minimize systemic loss in financial networks via Graph Neural Networks (Python)
 - Teaching assistant of several lectures, e.g., lin. algebra, optimization, comp. finance
 - Initiator and teacher of an Interview Preparation Class for students of mathematics
- 09/2021** **Alma Mater Studiorum Università di Bologna** *M.Sc. Quantitative Finance, Double Degree*
– 03/2022
- Final grade: 110/110 cum laude
 - Erasmus+ / Double Degree
 - Project: Implementation of a Trinomial Tree for Interest Rates (Python)
- 10/2019** **Ludwig-Maximilians-Universität-Munich** *M.Sc. Financial Mathematics, Double Degree*
– 03/2022
- Final grade: 1.08 (very good)
 - GrEnFin – Greening Energy Market and Finance - European Erasmus+ Project: GrEnFin Summer School 2020 (Bologna), GrEnFin Summer School 2021 (Katowice), GrEnFin Pilot Class 21/22 of LMU
 - Thesis: Signature Regression and an application to Credit Cycle Forecasting (Python), Grade: 1.0 (very good)
 - Project: Automatic algorithmic differentiation (Java - finmath library)
 - Project: Variance reduction for option pricing (Java - finmath library)
- 10/2016** **Ludwig-Maximilians-Universität-Munich** *B.Sc. Business Mathematics*
– 09/2019
- Grade: 1.48 (very good)
 - Thesis: Static replication of window double barrier options (Matlab), Grade: 1.0
- 09/2007** **Gabriel-von-Seidl Gymnasium Bad Tölz** *Abitur*
– 06/2015
- Abitur: 1.6 (good)
 - Final examinations: German, Mathematics, Physics, Latin, Philosophy
 - Seminar Thesis: LEDs and solar panels

Experience

- 05/2020** **Institute for Finance and Banking, LMU** *Student Research Assistant*
– 07/2021
- Webscraping of Wikipedia articles (Python)
 - Creating an ontology of business-related keywords for text classification (Matlab)
- 04/2018** **Department of Mathematics, LMU** *Tutor*
– 02/2021
- Tutoring students solving exercises
 - Presenting the solutions in class
 - Correcting exercise sheets
 - Lectures: financial mathematics, optimization and stochastics.

- 10/2019** **Bayerische Landesbank, Munich** *Intern Financial Markets*
- **01/2020**
- Drafting and implementing of a hedging tool that optimizes portfolios of different currencies using FX-Forwards and graphically illustrates the results (Excel VBA)
 - Assisting the CVA desk with daily tasks, e.g. CVA model validation
- 02/2019** **Versicherungskammer Bayern, Munich** *Intern Accounting*
- **04/2019**
- Supporting annual accounts by answering auditors' ad hoc requests
 - Implementing macros in Excel VBA to automatize reoccurring tasks
 - Preparing of presentations about work-from-home, flexible-working-hours and coworking-space topics within the "Group Diversity"
 - Conducting early-stage research regarding the feasibility of a chatbot for the accounting team

Engagement

- 09/2022** [Beta Sigma Club Munich](#) / **LMU Munich** Quantitative Finance Club
- Quant Finance Interview Preparation Course: founder and lecturer
 - Beta Sigma Club: Member, Supported founding of Munich branch by advertising Beta Sigma Club and recruiting board members
- 10/2016** **LMU Munich** *Student Council*
- **05/2022**
- Math student's speaker 2017 – 2019
 - Elected representative 2017 – 2020
 - Student member of several committees (appointment committee, accreditation committee)
- 09/2012** **Gabriel-von-Seidl Gymnasium Bad Tölz** *Student Council*
- **06/2015**
- Cohort representative year 10, 11 and 12
 - Founder and editor of two pupil's magazines

Promotion

- 04/2020** **Deutschlandstipendium**
- **03/2022**
- Shared scholarship of federal government and private sponsors for high-achieving and committed students
 - Sponsor: Allianz Deutschland (both 2020/2021 and 2021/2022)
- 10/2014** **Jugend Aktiv e.V.**
- **04/2015**
- Promotes very good and committed pupils with rhetoric seminars and mentoring

Skills and Interests

Languages: German (mother tongue), English (TOEFL 109), Italian (A2)

IT: Python (advanced), Java (advanced), MATLAB (advanced), Excel VBA (good), R (basic), C++ (basic), MS Office (advanced)

Interests: Trading Challenges (RTG, Prosperity), Strategy Games, Motorcycling Soccer, HIIT

M. Wesel

Munich, 26.07.2023