

Junyu Chen

Groningen, Beijing, Berlin | junyu.chen@outlook.de | junyu.chen@rug.nl

+49 15258138910 | +86 15798822563

WORKING PAPERS

- Chen, J., Liu, F., Xu, M., L, Yang. (2026) **Limit Order Book Forecasting with Conditional Diffusion Models**, accepted by *ICML 2026 Workshop on Structured Probabilistic Inference & Generative Modeling*, submitted to the *NeurIPS 2026*.
- Chen, J., Kong, L., Boot, T., Wang, W. (2026) **Transformer-based CoVaR: Systemic Risk in Textual Information**, invited submission to the *Journal of Financial Econometrics*.

EDUCATION

University of Chicago | Chicago, USA August 2024 - October 2028

Visiting Ph.D. Student

- Department of Statistics: Machine Learning and Stochastic Gradient Descent.

University of Groningen | Groningen, Netherlands September 2024 - August 2028

Ph.D. in Economics (Candidate)

- Research Area: Machine Learning, Financial Econometrics

Technische Universitaet Berlin | Berlin, Germany October 2020 - February 2024

M.Sc. in Industrial Engineering and Management (Wirtschaftsingenieurwesen), summa cum laude

- Modules: Machine Learning, Machine Intelligence, Cognitive Algorithms, Time Series Analysis, Microeconometrics, Treatment Effect Analysis, Financial Econometrics, International Financial Management, Game Theory, etc.

Technische Universitaet Berlin | Berlin, Germany October 2016 - May 2020

B.Sc. in Industrial Engineering and Management (Wirtschaftsingenieurwesen), magna cum laude

- Modules: Econometrics, Investment and Finance, Risk Management and Capital Market, Corporate Finance and Investment Controlling, Differential Equations, etc.

ACADEMIC EXPERIENCE

At the Chair of Econometrics | University of Groningen October 2023 - December 2023

Student Research Assistant

- Implemented a cross-validation algorithm and ran simulations for researching inference on derivatives of high-dimensional regression functions using deep neural networks
- Converted the code of the project Arellano-Bond LASSO Estimator into an R package for CRAN submission

At the Chair of Econometrics and Business Statistics | TU Berlin

Master Thesis: *Capturing the Market Component of Berlin Property Prices with a State-Space Model*

- Studied a state-space model for asset price forecasting, derived from a present-value model and an autoregressive model, where parameters are estimated by the EM algorithm and the Kalman Filter techniques

At the Chair of Accounting and Management Control | TU Berlin April 2021 - December 2022

Student Research Assistant

- Conducted academic literature research on diverse topics: Non-financial Disclosure, Corporate Social Responsibility, Social Loafing; summarized 7 academic papers and visualized the Stakeholder Orientation Index of CSR
- Assisted in the teaching of the seminar Accounting and Controlling

At the Chair of Finance and Investment | TU Berlin

Bachelor Thesis: *Insider Trading and Risk Aversion*

- Studied a mathematical microstructure model of financial markets based on Kyle's, where risk-averse insiders maximize profits by choosing their trading strategies under the camouflage of liquidity trading

WORK EXPERIENCE

Deloitte Risk Advisory | Berlin, Germany June 2023 - August 2023

Financial Engineer Intern, Quantitative Finance Tribe

- Supported the implementation of Bachelier model for clean energy markets in Python; automated valuation procedures of Power Purchase Agreements (PPAs) in Python scripts
- Engaged in ML-modeling (SVM) on credit risk for low default portfolios using scikit-learn

d-fine | Frankfurt, Germany

February 2023 - April 2023

Consultant Intern, Quantitative Sustainability Team

- Supported the development of a climate risk assessment tool and decarbonization tool for a leading European real estate company, utilizing Python, SQL, and Git
- Analyzed and presented the market regulations, policies and financing products for the UK green home financing program, resulting in a detailed report including actionable insights and a stakeholders map

Siemens Energy | Berlin, Germany

January 2020 - June 2021

Project Management Working Student, Gas and Power Sector

- Monitored the maintenance of 8 open cycle gas turbines boosting Egypt's power generation capacity by over 40% to supply 40 million Egyptians
- Tracked and managed orders from upstream manufacturers using SAP ERP; supported data evaluation with Excel and identified deviations from target measures; created a comprehensive business operations manual for colleagues

Yunnan Province International Trade Association | Kunming, China

May 2020 - August 2020

Research Intern, Economic Policy Office

- Collaborated with the Asian Development Bank and researched on social investment from the ESG perspective
- Drafted the report *A Preliminary Study on Industrial Development in the Pilot Free Trade Zone*, advising the Department of Commerce of Yunnan Province in policy making
- Analyzed the development model of the international advanced airport economy and completed the report *Development of Modern Trade and Commerce in Kunming Airport*

German Energy Agency (dena) | Berlin, Germany

March 2018 - August 2018

Analyst Intern, Energy Systems and Services Segment

- Analyzed 17 business models for sustainable energy and presented 2 new proposals
- Assisted in the project of developing an integrated energy system solution for the Chinese town Tongli, including smart infrastructure, green low carbon concepts and highly efficient resource management solutions

SKILLS

Computer: Python, R, Git, Tableau, SQL, L^AT_EX, SAP ERP

Languages: English (full professional proficiency), German (full professional proficiency), Mandarin (native)

INTEREST

Cycling: Solitary cycling for 2800 km in 22 days, completing one of the most challenging routes in China in 2018

Tennis: Started at the age of 10, current level NTPR 4.5

REFERENCES

- Prof. Dr. Weining Wang (U. Bristol): weining.wang@bristol.ac.uk
- Assoc. Prof. Dr. Tom Boot (U. Groningen): t.boot@rug.nl
- Asst. Prof. Dr. Lingwei Kong (U. Groningen): l.kong@rug.nl
- Prof. Dr. Wei-biao Wu (U. Chicago): wbwu@uchicago.edu
- Prof. Dr. Lijian Yang (Tsinghua U.): yanglijian@tsinghua.edu.cn
- Prof. Dr. Axel Werwatz (TU Berlin): axel.werwatz@tu-berlin.de