

Zeqian Yu

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EDUCATION

MRes in Economic Analysis
Universidad Carlos III de Madrid

Madrid, Spain
2026 – 2028 (incoming)

Master in Economics: Empirical Applications and Policies
UPV/EHU (University of the Basque Country)

Bilbao, Spain
Sep 2025 – Present

Master in Finance
EADA Business School Barcelona

Barcelona, Spain
2018

Bachelor of Economics Sciences in Finance
Xi'an International Studies University

Xi'an, China
2017

RESEARCH EXPERIENCE & COURSE PROJECTS

High-Speed Rail Expansion and Electric Vehicle Adoption in Spain

(ongoing Master's Thesis; supervised by Prof. Javier Gardeazabal)

- Estimate the causal effect of high-speed rail access on local electric-vehicle adoption, using the staggered expansion of Spain's rail network as a natural experiment.
- Build a nationwide municipality-by-year panel for 2015–2025 that links vehicle-registration records with rail-network geography, local economic conditions, charging infrastructure, and purchase-subsidy policy.
- Identify effects with a matched staggered difference-in-differences design and the heterogeneity-robust Callaway and Sant'Anna estimator, supported by covariate-balance and parallel-trends diagnostics, tests of competing mechanisms, and a least-cost-network instrumental-variable strategy.

Electricity Market Dynamics and Pricing

- Measured concentration in Spain's intraday electricity market (2021–2025) using a range of market-concentration indices and tracked how it shifted over time.
- Reconstructed supply and demand curves from day-ahead hourly bidding data (2020) to estimate equilibrium prices, comparing alternative functional-form specifications.
- Analyzed daily electricity prices for Ireland (2015–2025) with time-series models to assess price persistence, seasonality, and volatility.

Web Scraping and Sentiment Analysis of Research Publications

- Built an automated pipeline to scrape a researcher's full publication record from Google Scholar, assembling a structured dataset of titles, authors, publication years, citations, and journals.
- Applied lexicon-based sentiment analysis to trace how the tone of publication titles evolved over time, and packaged the results in an interactive web application.

Student Achievement Prediction Using Machine Learning

- Predicted student math achievement from international PISA assessment microdata for Hong Kong, cleaning the data and preparing a broad set of demographic, socioeconomic, attitudinal, and school-climate predictors.
- Built, trained, and tuned a full machine-learning workflow spanning Ridge, LASSO, Elastic Net, Decision Tree, Bagging, Random Forest, and Gradient Boosting, then compared their accuracy to select the strongest predictive model.
- Used dimensionality reduction and clustering to profile students by socioeconomic background and learning attitudes.

WORKSHOPS, SEMINARS & CONFERENCES

Data Science Summer School
Hertie School Data Science Lab

Berlin, Germany (Remote)
2025

- Core courses in R and Python programming, applied calculus, linear algebra, and statistics and probability, with advanced applications in AI agents and experimental design.

Computational and Analytic Techniques in the Humanities and Social Sciences Nicosia, Cyprus (Remote)
University of Cyprus 2025

- Introductory training in GIS and remote sensing for social-science research.

Series of Academic and Professional Courses Self-paced (Online)
Santander Open Academy 2024

- Completed courses including Introduction to Data Science, Generative AI, Digital Transformation, and Internet of Things.

Academic Writing for the Health and Social Sciences Vic, Spain (Remote)
University of Vic – University of Central Catalonia 2023

- Structuring research articles and building academic writing skills.

Presentations at Congresses, Conferences and Workshops Vic, Spain (Remote)
University of Vic – University of Central Catalonia 2023

- Practical tools for delivering research presentations in English.

Graphic Design for Presentations and Scientific Communication Vic, Spain (Remote)
University of Vic – University of Central Catalonia 2023

- Building skills to design clearer, more effective visuals for scientific communication.

EURAXESS Science Slam China Science Communication Training Beijing, China (Remote)
EURAXESS 2023

- Online science-communication training in scriptwriting, research pitching, and short science videos; awarded the top-level Diamond certificate.

Public Speaking and Investor Pitching Toruń, Poland
Nicolaus Copernicus University 2022

- Delivering clear presentations and pitching ideas effectively.

Data Science Summer School Berlin, Germany (Remote)
Hertie School Data Science Lab 2022

- Advanced machine-learning and deep-learning applications in computer vision and natural-language processing.

EURAXESS Science Slam China Science Communication Training Beijing, China (Remote)
EURAXESS 2021

- Online science-communication training in public speaking, creative pitching, and audience engagement; awarded the top-level Diamond certificate.

RELEVANT PROFESSIONAL EXPERIENCE

E-House (China) Holdings Limited, CRIC Shenzhen, China
Consultant, Data Service Department Mar. 2019 – Aug. 2022

- Conducted market research and financial analysis to identify trends and deliver actionable insights for clients in the real-estate industry.
- Led the creation of monthly market reports, from initial analysis to refined, client-ready outputs, and coauthored two industry white papers on the Greater Bay Area.
- Supervised and mentored a team to deliver high-quality, data-driven research reports.

HONORS & AWARDS

Tuition Waiver, MRes in Economic Analysis 2026
Universidad Carlos III de Madrid

OTHER INFORMATION

Languages: Chinese (native); English (C1)

Technical Skills: R; Stata; ArcGIS; Beginner in MATLAB; L^AT_EX

Certificates: CFA Level I