



Omer Kara

Curriculum Vitæ

CONTACT INFORMATION	Eskisehir Osmangazi University College of Economics and Administrative Sciences Department of Economics, Office A1-21 Eskisehir, 26040 Turkey	☎ : +90 (539) 794-0221 ✉ : omer.kara.ylsy@gmail.com 📄 : ⓘ :
RESEARCH INTERESTS	Primary: Spatial Econometrics, Panel Data Econometrics, Time-Series Econometrics, Data Science Secondary: Applied Microeconomics, Applied Macroeconomics, Agricultural Economics, Cryptoeconomics	
INDUSTRY INTERESTS	Primary: Econometrician, Data Scientist, Consultant Secondary: Quantitative Analyst, Software Developer	
ACADEMIC APPOINTMENTS	Faculty Member, Ph.D. Department of Economics Eskisehir Osmangazi University, Eskisehir, Turkey Postdoctoral Researcher Department of Economics North Carolina State University, Raleigh, NC, USA	January 2019 – Present May 2018 – August 2018
EDUCATION	Ph.D., Economics North Carolina State University, Raleigh, NC, USA <ul style="list-style-type: none"> • Dissertation: <i>Three Essays in Applied Spatial and Time Series Econometrics</i> • Advisor: Dr. Barry Goodwin • Area of Study: Time Series Econometrics and Spatial Econometrics M.S., Agricultural and Resource Economics North Carolina State University, Raleigh, NC, USA B.A., Economics Bahcesehir University, Istanbul, Turkey	May 2018 August 2012 July 2008
INDUSTRY EXPERIENCE	Software Developer CHS Inc., Inver Grove Heights, MN, USA <ul style="list-style-type: none"> • Job: Building the “Crack Spread Platform”, a shiny web app (in progress) • Tools: R, R Markdown, shiny, HTML, CSS, Azure DevOps, Git, ETL, EDA Software Developer CHS Inc., Inver Grove Heights, MN, USA <ul style="list-style-type: none"> • Job: Building the “Hog Crush Platform”, a shiny web app (in marketing) • Tools: R, R Markdown, shiny, HTML, CSS, Azure DevOps, Git, ETL, EDA Data Scientist The World Bank, Washington, DC, USA <ul style="list-style-type: none"> • Job: Sierra Leone CEM - Agriculture Sector Deep Dive • Tools: FAOSTAT, R, R Markdown, ETL, EDA Data Scientist and Econometrician CHS Inc., Inver Grove Heights, MN, USA <ul style="list-style-type: none"> • Job: Churn Loss Analysis • Tools: Statistics, Econometrics, Machine Learning, R, R Markdown, ETL, EDA 	January 2022 – Present August 2021 – Present June 2023 – December 2023 July 2022 – January 2023

**REFEREED
JOURNAL
PUBLICATIONS**

- [1] Acaroğlu, H., Najafi, A., **Kara, Ö.**, & Yürük, B. (2021). An Economic and Technical Review for the Utilization of HVDC in Turkey and in the World. *Konya Journal of Engineering Sciences*, 9(3), 809–835. [doi](#)
- [2] Acaroğlu, H., Baykul M. C., & **Kara, Ö.** (2025). A Life-Cycle Cost Analysis on Photovoltaic (PV) Modules for Türkiye: The Case of Eskisehir's Solar Market Transactions. *Sustainability*, 17(24), 11023. [doi](#)

**CONFERENCE
PRESENTATIONS**

- [1] **Kara, Ö.** (2020). Price Dynamics and Structural Breaks in Speculative Markets: A Case Study of Cryptocurrency. *International Conference on Economics (EconTR2020@Eskişehir)*, Eskişehir, Türkiye, 10–12 September 2020.
- [2] **Kara, Ö.** (2020). Identifying and Understanding the Structural Break in Meat Demand in the USA. *International Conference on Economics (EconTR2020@Eskişehir)*, Eskişehir, Türkiye, 10–12 September 2020.

**OTHER
PUBLICATIONS**

- [1] **Kara, Ö.** (2018). Emek piyasası, İstihdam ve İşsizlik. *Makroekonomi: Politika ve Uygulama* (pp. 544–570). Ankara: Nobel Yayın Dağıtım. *Book Chapter Translation*.

**WORKING
PAPERS**

- “Dynamics of U.S. Housing and Primary Building Materials in the Presence of Structural Break”
- “The Impact of Religion on Environmental Performance: Applied Spatial Econometrics”
- “Price Dynamics and Structural Breaks in Speculative Markets: A Case Study of Cryptocurrency”
- “Structural Break in U.S. Meat Demand: Evidence from the LA/AIDS Model”
- “The Effect of the Quality of Institutions on Agricultural Productivity”
- “A Novel Perspective for Productive Manufacturing of Photovoltaic (PV) Cells in Eskisehir, Türkiye” (with [Dr. Hakan Acaroğlu](#) and [Dr. Mevlana Celalettin Baykul](#))
- “Economic, Social, Environmental, and Institutional Factors Shaping Onshore Wind LCOE in Europe: Evidence from Spatial Panel Models” (with [Dr. Hakan Acaroğlu](#))

**WORKS IN
PROGRESS**

- “Economic Consequences of Foreign Player Restriction in European Soccer Leagues”
- “Price Dynamics Between Cryptocurrency, Fiat Money, Stocks, Gold, and Oil: Before and After COVID–19” (with [İlknur Büşra Çakır](#))
- “The Impact of the Quality of Institutions on Income: Evidence from a Dynamic Spatial Panel Model with Common Factors” (with [Selen Serenay Silvan](#))

**ACADEMIC
SERVICE****Erasmus Coordinator**

January 2019 – Present

Department of Economics

Eskisehir Osmangazi University, Eskisehir, Turkey

Editorial Service

- English Language Editor, [Eskişehir Osmangazi Üniversitesi İktisadi ve İdari Bilimler Dergisi](#)

Referee Service

- [Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi](#)

**WORKSHOPS
GIVEN****Shiny mini BootCamp**

May 2024

Department of Business and Quantitative Studies

University of Naples Parthenope, Naples, Italy

- During the Erasmus+ KA131 Teaching Mobility program.
- Two days of Shiny bootcamp given to undergraduate students in [Dr. De Luca's](#) lecture.
- Developed and lectured theoretical teaching materials and hands on application files.
- Detailed Information: [Shiny mini BootCamp](#)

R mini BootCamp

February 2018

Department of Economics

North Carolina State University, Raleigh, NC, USA

- Three days of R bootcamp given to undergraduate students in NCSU.
- Developed and lectured theoretical teaching materials and hands on application files.
- Detailed Information: [R mini BootCamp](#)

**TECHNICAL
SKILLS**

- **Programming:** R, Python, SQL, Stata, SAS, MATLAB, GAUSS
- **Data Science:** Statistics, Econometrics, Machine Learning, Web Scraping, ETL, EDA
- **GIS:** Geo-Spatial Data, ArcGIS, QGIS, GeoDa
- **Digital Typesetting:** \LaTeX , Markdown
- **Other Skills:** R Markdown, shiny, Shell, Git, Azure DevOps, Reproducible Research

**CERTIFICATIONS
AND
CERTIFICATES****Certifications**

- Data Scientist Associate Certification, DataCamp  January 2023 – January 2025

Certificates*Only selected certificates are shown. More information can be found on [my web site](#).

- Data Scientist Professional with R, DataCamp
- Data Scientist with R, DataCamp
- Data Analyst with R, DataCamp
- R Programmer, DataCamp
- Data Scientist with Python, DataCamp
- Data Analyst with Python, DataCamp
- Python Programmer, DataCamp
- Statistical Inference, Coursera
- Reproducible Research, Coursera
- Exploratory Data Analysis, Coursera
- Getting and Cleaning Data, Coursera
- R Programming, Coursera
- The Data Scientist's Toolbox, Coursera
- Maps and the Geospatial Revolution, Coursera and PennState
- SAS Programming 2: Data Manipulation Techniques, SAS
- SAS Programming 1: Essentials, SAS
- SAS Programming Introduction: Basic Concepts, SAS

**SCHOLARSHIPS
FELLOWSHIPS
HONORS
AND
AWARDS**

- **Graduate Research Assistantship** August 2016 – January 2017
North Carolina State University, Raleigh, NC, USA
- **Graduate Teaching Assistantship** August 2013 – May 2018
North Carolina State University, Raleigh, NC, USA
- **Scholarship for Graduate Education in the U.S.** August 2010 – August 2017
Ministry of National Education, Ankara, Turkey
Full-tuition scholarship including stipend, health insurance, and travel expenses.
- **Grant for Outstanding Academic Performance** September 2005 – June 2007
Bahcesehir University, Istanbul, Turkey
Stipend for attaining a GPA of at least 3.8 for four semesters.
- **Scholarship for Undergraduate Education** September 2003 – June 2008
Bahcesehir University, Istanbul, Turkey
Full-tuition scholarship including stipend.

RESEARCH EXPERIENCE

Postdoctoral Researcher

May 2018 – August 2018

Department of Economics

North Carolina State University, Raleigh, NC, USA

- Project Details:
 - Funding: USDA Forest Service
 - Supervisor: Dr. Barry Goodwin and Dr. Jeffrey Prestemon
 - Project Title: “Understanding Global Forest Product Market Effects of Trade Measures to Address Illegal Wood Fiber Sourcing”
- Created a collaborative reproducible research environment using [Git](#), [R](#), [R Markdown](#).
- Accelerated data collection/cleaning and statistical/exploratory data analysis steps with flexible user-written [R](#) functions and check procedures.

Research Assistant

August 2016 – January 2017

Department of Economics

North Carolina State University, Raleigh, NC, USA

- Project Details:
 - Funding: North Carolina State University
 - Supervisor: Dr. Barry Goodwin
 - Project Title: “Dynamics of U.S. Housing and Primary Building Materials in the Presence of Structural Breaks”
- Created a conceptual framework, collected data in a reproducible way, and performed a through econometric analyses on [R](#) and [GAUSS](#).

TEACHING EXPERIENCE

Independent Instructor

January 2019 – Present

Department of Economics

Eskisehir Osmangazi University, Eskisehir, Turkey

- Created course design, lecture format, course materials, and online assessment materials.
- Authored course materials are available at the [Akademi Ekonometri Web Site](#).
- Course videos are available on [Akademi Ekonometri YouTube Channel](#).
- Courses in English: Economics
- Courses in Turkish: Econometrics I, Econometrics II, Econometrics, Time Series Analysis, Econometric Research I, Econometric Research II, Economics, Introduction to Economics I, Econometric Modelling and Time Series Analysis - Masters, Financial Econometrics - Masters, Semester Project - Masters

Teaching Assistant

January 2017 – May 2018

Department of Economics

North Carolina State University, Raleigh, NC, USA

- Assisted Dr. Margolis and Dr. Fiori with grading assignments and exams.
- Courses: Intermediate Microeconomics, Macro Fundamentals

Independent Instructor

August 2014 – May 2016

Department of Economics

North Carolina State University, Raleigh, NC, USA

- Created course design, lecture format, and assessment materials.
- Developed and lectured course materials.
- Mentored students providing individualized learning support and online assignments.
- Courses: Fundamentals of Economics, Principles of Microeconomics

Teaching Assistant

August 2013 – May 2014

Department of Economics

North Carolina State University, Raleigh, NC, USA

- Assisted Dr. Hyman as head teaching assistant and lab instructor.
- Developed and lectured lab materials independently.
- Improved students’ performance by implementing a collaborative learning environment.
- Courses: Fundamentals of Economics

LANGUAGES

- English (C2 Proficiency - fluent)
- Turkish (native)

POPULAR MEDIA

- Founder of [Akademi Ekonometri Website](#) and [Akademi Ekonometri YouTube Channel](#).

MORE INFORMATION

More information and auxiliary documents can be found on [my web site](#).

REFERENCES

Dr. Barry Goodwin

William Neal Reynolds Distinguished Professor
Agricultural and Resource Economics
North Carolina State University
Raleigh, NC 27695-8109

☎ : +1 (919) 515-4620

✉ : bkgoodwi@ncsu.edu

👤 : Dr. Goodwin was my graduate advisor and post doctoral supervisor.

Dr. Walter Thurman

William Neal Reynolds Distinguished Professor
Agricultural and Resource Economics
North Carolina State University
Raleigh, NC 27695-8109

☎ : +1 (919) 515-4545

✉ : wally_thurman@ncsu.edu

👤 : Dr. Thurman was a member of my doctoral committee.

Dr. Jeffrey Prestemon

Adjunct Professor
Forestry and Environmental Resources
North Carolina State University
Raleigh, NC 27695-8109

☎ : +1 (919) 549-4033

✉ : jprestemon@fs.fed.us

👤 : Dr. Prestemon was a member of my doctoral committee.

*More references are available upon request.