



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 A : i :
RESEARCH INTERESTS	Primary: Data Science, Time Series Econometrics, Spatial Econometrics, Cryptoeconomics Secondary: Agricultural Economics, Applied Microeconomics, Applied Macroeconomics	
INDUSTRY INTERESTS	Primary: Data Scientist, Econometrician, 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 • Dissertation: <i>Three Essays in Applied Spatial and Time Series Econometrics</i> • Advisor: Professor 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 May 2012 June 2008
INDUSTRY EXPERIENCE	Data Scientist The World Bank, Washington, DC, USA • Job: Sierra Leone CEM - Agriculture Sector Deep Dive (in progress) • Tools: FAOSTAT, R, R Markdown, ETL, EDA Data Scientist and Econometrician CHS Inc., Inver Grove Heights, MN, USA • Job: Churn Loss Analysis (in progress) • Tools: Statistics, Econometrics, Machine Learning, R, R Markdown, ETL, EDA Software Developer CHS Inc., Inver Grove Heights, MN, USA • 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 • Job: Building the “Hog Crush Platform”, a shiny web app (in marketing) • Tools: R, R Markdown, shiny, HTML, CSS, Azure DevOps, Git, ETL, EDA	June 2023 – Present July 2022 – Present January 2022 – Present August 2021 – Present

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: Professor Barry Goodwin and Professor 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: Professor 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](#), [Time Series Analysis](#), [Econometric Research I](#), [Econometric Research II](#), [Economics](#), [Introduction to Economics](#), [Econometrics](#), [Econometric Modelling and Time Series Analysis - Masters](#), [Financial Econometrics - 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

**TECHNICAL
SKILLS**

- **Programming:** R, Python, SQL, SAS, MATLAB, GAUSS
- **Data Science:** Statistics, Econometrics, Machine Learning, Web Scraping, ETL, EDA
- **GIS:** Geo-Spatial Data, ArcGIS, QGIS, GeoDa
- **Digital Typesetting:** L^AT_EX, 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.

**REFEREED
JOURNAL
PUBLICATIONS**

- [1] **Kara, O.**, Acaroglu, H., Najafi, A., and Yuruk, 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. 

**CONFERENCE
PRESENTATIONS**

- [1] **Kara, O.**, Price Dynamics and Structural Breaks in Speculative Markets: A Case Study of Cryptocurrency. International Conference on Economics (EconTR2020@Eskişehir), Eskişehir, Turkey, 10-12 September 2020.

- [2] **Kara, O.**, Identifying and Understanding the Structural Break in Meat Demand in the USA. International Conference on Economics (EconTR2020@Eskişehir), Eskişehir, Turkey, 10-12 September 2020.

**OTHER
PUBLICATIONS**

- [1] **Kara, O.**, (2018). Emek Piyasası, İstihdam ve İşsizlik. MAKROEKONOMİ 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” with [Barry Goodwin](#) and [Jeffrey Prestemon](#)
- “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 LA/AIDS Model”
- “The Effect of Quality of Institutions on Agricultural Productivity”

**WORKS IN
PROGRESS**

- “Price Dynamics Between Cryptocurrency, Fiat Money, Stocks, Gold, and OIL: Before and After COVID-19”
- “Impacts of Quality of Institutions on Income”
- “Economic Consequences of Foreign Player Restriction in European Soccer Leagues”

**ACADEMIC
SERVICE**

Erasmus Coordinator

January 2019 – Present

Department of Economics

Eskişehir Osmangazi University, Eskişehir, Turkey

Referee Service

- Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi

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.