



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 🌐 : ORCID Google Scholar Scopus ResearchGate 🌐 : Publons Academia.edu Google Scholar Academy Publons
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	January 2019 – Present
	Postdoctoral Researcher Department of Economics North Carolina State University, Raleigh, NC, USA	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> [6]• Advisor: Dr. Barry Goodwin• Area of Study: Time Series Econometrics and Spatial Econometrics	May 2018
	M.S., Agricultural and Resource Economics North Carolina State University, Raleigh, NC, USA	August 2012
	B.A., Economics Bahcesehir University, Istanbul, Turkey	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	January 2022 – Present
	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	August 2021 – Present
	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	June 2023 – December 2023
	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	July 2022 – January 2023

REFEREED JOURNAL PUBLICATIONS	<p>[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. <i>Konya Journal of Engineering Sciences</i>, 9(3), 809–835. doi</p> <p>[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. <i>Sustainability</i>, 17(24), 11023. doi</p>
CONFERENCE PRESENTATIONS	<p>[1] Kara, Ö. (2020). Price Dynamics and Structural Breaks in Speculative Markets: A Case Study of Cryptocurrency. <i>International Conference on Economics (EconTR2020@Eskişehir)</i>, Eskişehir, Türkiye, 10–12 September 2020.</p> <p>[2] Kara, Ö. (2020). Identifying and Understanding the Structural Break in Meat Demand in the USA. <i>International Conference on Economics (EconTR2020@Eskişehir)</i>, Eskişehir, Türkiye, 10–12 September 2020.</p>
OTHER PUBLICATIONS	<p>[1] Kara, Ö. (2018). Emek piyasası, İstihdam ve İşsizlik. <i>Makroekonomi: Politika ve Uygulama</i> (pp. 544–570). Ankara: Nobel Yayın Dağıtım. <i>Book Chapter Translation</i>.</p>
WORKING PAPERS	<ul style="list-style-type: none"> • “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	<ul style="list-style-type: none"> • “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	<p>Erasmus Coordinator January 2019 – Present Department of Economics Eskisehir Osmangazi University, Eskisehir, Turkey</p> <p>Editorial Service <ul style="list-style-type: none"> • English Language Editor, Eskisehir Osmangazi Üniversitesi İktisadi ve İdari Bilimler Dergisi </p> <p>Referee Service <ul style="list-style-type: none"> • Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi </p>
WORKHOPS GIVEN	<p>Shiny mini BootCamp May 2024 Department of Business and Quantitative Studies University of Naples Parthenope, Naples, Italy <ul style="list-style-type: none"> • 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 </p>

	R mini BootCamp Department of Economics North Carolina State University, Raleigh, NC, USA <ul style="list-style-type: none"> • 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 	February 2018
TECHNICAL SKILLS	<ul style="list-style-type: none"> • 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: L^AT_EX, Markdown • Other Skills: R Markdown, shiny, Shell, Git, Azure DevOps, Reproducible Research 	
CERTIFICATIONS AND CERTIFICATES	<p>Certifications</p> <ul style="list-style-type: none"> • Data Scientist Associate Certification, DataCamp  January 2023 – January 2025 <p>Certificates</p> <p>*Only selected certificates are shown. More information can be found on my web site.</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Graduate Research Assistantship North Carolina State University, Raleigh, NC, USA August 2016 – January 2017 • Graduate Teaching Assistantship North Carolina State University, Raleigh, NC, USA August 2013 – May 2018 • Scholarship for Graduate Education in the U.S. Ministry of National Education, Ankara, Turkey August 2010 – August 2017 Full-tuition scholarship including stipend, health insurance, and travel expenses. • Grant for Outstanding Academic Performance Bahcesehir University, Istanbul, Turkey September 2005 – June 2007 Stipend for attaining a GPA of at least 3.8 for four semesters. • Scholarship for Undergraduate Education Bahcesehir University, Istanbul, Turkey September 2003 – June 2008 Full-tuition scholarship including stipend. 	

**RESEARCH
EXPERIENCE**

Postdoctoral Researcher Department of Economics North Carolina State University, Raleigh, NC, USA	May 2018 – August 2018
<ul style="list-style-type: none"> • Project Details: <ul style="list-style-type: none"> - 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 Department of Economics North Carolina State University, Raleigh, NC, USA	August 2016 – January 2017

Research Assistant Department of Economics North Carolina State University, Raleigh, NC, USA	August 2016 – January 2017
<ul style="list-style-type: none"> • Project Details: <ul style="list-style-type: none"> - 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. 	
Independent Instructor Department of Economics Eskisehir Osmangazi University, Eskisehir, Turkey	January 2019 – Present

**TEACHING
EXPERIENCE**

Independent Instructor Department of Economics Eskisehir Osmangazi University, Eskisehir, Turkey	January 2019 – Present
<ul style="list-style-type: none"> • 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 Department of Economics North Carolina State University, Raleigh, NC, USA	January 2017 – May 2018

Teaching Assistant Department of Economics North Carolina State University, Raleigh, NC, USA	January 2017 – May 2018
<ul style="list-style-type: none"> • Assisted Dr. Margolis and Dr. Fiori with grading assignments and exams. • Courses: Intermediate Microeconomics, Macro Fundamentals 	
Independent Instructor Department of Economics North Carolina State University, Raleigh, NC, USA	August 2014 – May 2016

Independent Instructor Department of Economics North Carolina State University, Raleigh, NC, USA	August 2014 – May 2016
<ul style="list-style-type: none"> • 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 Department of Economics North Carolina State University, Raleigh, NC, USA	August 2013 – May 2014

Teaching Assistant Department of Economics North Carolina State University, Raleigh, NC, USA	August 2013 – May 2014
<ul style="list-style-type: none"> • 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 	
Independent Instructor Department of Economics Eskisehir Osmangazi University, Eskisehir, Turkey	January 2019 – Present

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| LANGUAGES | <ul style="list-style-type: none">• English (C2 Proficiency - fluent)• Turkish (native) |
| POPULAR MEDIA | <ul style="list-style-type: none">• 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
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Raleigh, NC 27695-8109
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✉️ : bkgoodwi@ncsu.edu
👤 : Dr. Goodwin was my graduate advisor and post doctoral supervisor.

Dr. Jeffrey Prestemon

Adjunct Professor
Forestry and Environmental Resources
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👤 : Dr. Prestemon was a member of my doctoral committee.

Dr. Walter Thurman

William Neal Reynolds Distinguished Professor
Agricultural and Resource Economics
North Carolina State University
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📞 : +1 (919) 515-4545
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👤 : Dr. Thurman was a member of my doctoral committee.

*More references are available upon request.