

Lily Shen

Clemson University

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Department of Finance

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Personal

US Citizen

Education

Ph.D. The Pennsylvania State University, University Park, June 2016.

Major: Business Administration (GPA 3.83/4.0)

Supporting Field: Finance, Statistics.

Dissertation: The Role of Information in the Real Estate Market

Advisor: Dr. Brent Ambrose.

B.A. University of California, Berkeley, June 2010

Major: Financial Mathematics (GPA 3.8/4.0)

Minor: Industrial Engineering and Operations Research

–Research Assistant for Prof. Robert Edelstein, Haas School of Business

Research Interests

Fintech, Proptech, Large Language Models, Generative AI

Household Finance, Mortgages, Mortgage Backed Securities, Affordable Housing, Real Estate

Employment

Current Positions

Associate Professor, Clemson University, Department of Finance, Aug. 2023 – Present.

Visiting Scholar, Federal Reserve Bank of Atlanta, Jul. 2017 – Present.

Past Positions

Visiting Scholar, University of Cambridge, Department of Land Economy, Aug. 2023 – Oct. 2023.

Assistant Professor, Clemson University, Department of Finance, Aug. 2016 – July 2023.

Visiting Scholar, Federal Reserve Bank of Cleveland, May 2018 – Aug. 2018.

Visiting Scholar, Federal Reserve Bank of Minneapolis, May 2015 – Aug. 2015.

Visiting Scholar, Federal Reserve Bank of Atlanta, May 2014 – Aug. 2014.

Research Assistant, Instructor, The Pennsylvania State University, Aug. 2011 – Jun. 2016.

Research Assistant, Student Instructor, University of California, Berkeley, Aug. 2008 – Dec. 2009.

Other Affiliations

Editorial Board, Journal of Housing Research, 2022 – present

Editorial Board, Journal of Real Estate Literature, 2023 – present

Board Director of International Real Estate Society (IRES), 2024 – present

Homer Hoyt Institute, Postdoctoral Honoree (selected 2025; Weimer School session Jan. 2026), 2025 – Present

Textbook

“Commercial Real Estate Analysis for Investment, Finance and Development,” 4th Edition, with David M. Geltner, Norman G. Miller, Alex van de Minne, Piet Eichholtz, and Thies Lindenthal. *Routledge*, 2026.
–the latest edition of a leading commercial real estate textbook for advanced students

“Real Estate Finance and Investments,” 2027 release, with Jeffrey D. Fisher, Jacob Sagi, and Stephanie R. Yates. *McGraw-Hill*.

– the 2027 edition of a widely adopted foundational textbook in real estate finance and investment analysis. Author of the test banks and assessment materials for both textbooks, including the new chapters on AI in real estate.

Teaching

Finance AI in Finance (Grad Level), Clemson University (New Course, Spring 2027)

Finance 4980 CI Machine Learning in Finance, Clemson University (2018–Present)

Finance 4980 CI AI in Finance, Clemson University (2018–Present)

Finance 4100 Research in Finance, Machine Learning, Clemson University (SP 2018)

Finance 3070 Real Estate Principles, Clemson University (2016–Present)

Finance 3070 Real Estate Principles, Clemson University (2024) -Certified Online Course by Quality Matters

Finance 4170 Real Estate Finance, Clemson University (2016–Present)

Risk Management 450 Contemporary Issues in Real Estate, Penn State (FA 2015, SP 2014, 2013)

Risk Management 470 Real Estate Finance, Penn State [Teaching Assistant] (SP 2014, SP 2012)

Selected Honors and Awards

American Real Estate Society Kinnard Young Scholar Award, 2026

–Recognizes outstanding research contributions by a scholar in the early stage of an academic career

American Real Estate Society Best Article Award, *Journal of Real Estate Research*, 2025

–For “The More, the Merrier: Agent Connectedness in Real Estate Trading Networks” (with Xiaojin Sun)

James R. Webb ARES Foundation Global Ambassador Grant, 2026

–Competitive travel grant supporting ARES representation at international sister-society conferences

Clemson University Wilbur O. and Ann Powers College of Business Summer Research Grant, 2021, 2022, 2026

Clemson COB Senior Scholar Research Excellence Award, 2025-2026

The Red Pen Award, *Journal of Real Estate Literature*, 2025

Cocoziello Institute Seed Grants, 2024

–\$85,000 Seed Grants for the research titled “Real Estate Markets and Firm Production Reshoring Decisions”

–Shared with two researchers at the Pennsylvania State University

Homer Hoyt Institute/Weimer School Advanced Studies in Real Estate honoree, 2025 (session held Jan. 2026)

–An invitation-only research institute that recognizes established researchers in real estate.

Clemson University Mid-career Faculty Grant, 2024

College of Business Featured Faculty Member

- Selected to be highlighted at the Clemson University Board of Trustees Meeting, 2024

Best Paper Award, *Journal of Housing Research*, 2022 Volume

Best Paper Award 3rd place, AREUEA International Conference, 2022

The Real Estate Research Institute (RERI) Research Grant, 2021

Clemson College of Business Dean’s Award for Student Engagement, 2019-2020

–Annual single recipient award in recognizing outstanding contributions to student engagement

American Real Estate Society Manuscript Prize, 2019 [Single Author]

–Best paper award in real estate valuation

AEA CSWEP Economics Fellowship, 2018, 2015, 2014

– This is a selective fellowship sponsored by the American Economic Association (AEA) and the National Science Foundation (NSF).

Clemson University Creative Inquiry Research Grant, 2020, 2019

Clemson University One-Year Accelerate Grant, 2016

Penn State University Smeal Research Grant, 2015

ARES Annual Meeting Doctoral Award, 2014

Penn State Doctoral Student Fellowship, 2013, 2012, 2011

Real Estate Research Institute Annual Conference Doctoral Award, 2013

Frank P. and Mary Jean Smeal Endowment Fund Scholarship, 2012, 2011

Scholar of UC Berkeley Academic Achievement Program, 2010, 2009, 2008, 2007

UC Berkeley Outstanding Student Scholarship 2010, 2009, 2008, 2007
– Full Ride Scholarship to Berkeley students with high GPA

UC Berkeley Summer Undergraduate Research Fellowship, 2008

UC Berkeley Undergraduate Research Apprentice Program, 2010, 2009, 2008

Sylvia Panetta Scholarship sponsored by The Panetta Institute for Public Policy, 2006

Work Presented at

Scheduled: 2027 AREUEA Annual Conference (jointly with ASSA), Washington, DC (Jan. 3–5, 2027)
(×2)

- Accepted paper: “Who Prices Flood Risk and When: Evidence from Housing Markets” (with Sirui Cai)
- Accepted paper: “Political Alignment and Neighborhood Choice Among Homebuyers” (with Sirui Cai, Yongqiang Chu, and Thao Le)

Scheduled: 4th ODU Real Estate Research Symposium, in association with the *Journal of Real Estate Portfolio Management*, Old Dominion University, Norfolk, VA (Oct. 29–30, 2026)

- Accepted paper: “Cheap Talk or Priced Information? Listing Language and Housing Transaction Outcomes” [Single Author]

University of Cambridge | Hong Kong University, Real Estate Finance and Investment Symposium, Cambridge, UK (Sep. 2026)*

American Real Estate Society Annual Meeting, Destin, FL (Mar. 2026) (×2)

JRER/UCF Current Issues in Real Estate Symposium, Orlando, FL (Mar. 2026)

2026 Homer Hoyt Institute, West Palm Beach, FL (Jan. 2026)

–Selected in 2025 as a postdoctoral honoree in the Institute’s highly selective program for leading real estate academics and industry researchers worldwide

University of Kentucky, Gatton College of Business and Economics, Lexington, KY (Nov. 2025)*

Real Estate Commissions and Housing Market Frictions Conference, Federal Reserve Bank of Richmond, Richmond, VA (Apr. 2025)*

2025 Homer Hoyt Institute, West Palm Beach, FL (Jan. 2025)*

Florida State University, College of Business, Tallahassee, FL (Dec. 2024)

2024 North American Meeting of the Urban Economics Association, Georgetown University, Washington, D.C. (Sep. 2024)

Confronting America’s Housing Crisis: Solutions for the 21st Century, The Murphy Institute, New Orleans, LA (Apr. 2024)*

American Real Estate Society’s 40th Annual Meeting, Orlando, FL (Mar. 2024)*

JRER/UCF Current Issues in Real Estate Symposium, Orlando, FL (Mar. 2024)

Clemson University, Powers College of Business Seminar Series, Clemson, SC (Feb. 2024)

University of Hawaii at Manoa, Department of Economics, Manoa, HI (Feb. 2024)*

University of Georgia, Department of Real Estate Seminar, Athens, GA (Sep. 2023)*

Penn State University, Department of Risk Management, Virtual Seminar (Sep. 2023)*

North American Meeting of the Urban Economics Association, Toronto (Oct. 2023)*

Real Estate Research Symposium, Lindsay School of Real Estate & E.V. Williams Center for Real Estate, Old Dominion University, Norfolk, VA (Oct. 2023)

Zillow, Invited Research Talk, Remote (Jun. 2023)*

Zicklin School of Business, Baruch College, New York City, NY (Feb. 2023)

Carl H. Lindner College of Business, University of Cincinnati, OH, Cincinnati, NY (Jan. 2023)

AREUEA/Allied Social Science Association Meeting, New Orleans, LA (Jan. 2023)*

SMU-Jinan Urban and Regional Conference, Singapore Management University, Singapore (Dec. 2022)*

University of Texas at Arlington, Finance and Real Estate Department, Arlington, TX (Nov. 2022)*

University of Georgia, Department of Real Estate Seminar, Athens, GA (Nov. 2022)

69th Annual North American Meetings of the Regional Science Association International, Montreal, Canada (Nov. 2022)*

University of Cambridge| University of Florida| University of Geneva| National University of Singapore Real Estate Finance and Investment Symposium, Gainesville, FL (Nov. 2022)

16th North American Meeting of the Urban Economics Association, Washington, D.C. (Sep. 2022)

The Innovations in Housing Affordability Summit hosted by the University of Utah, Salt Lake City, UT (Oct. 2022)

16th North American Meeting of the Urban Economics Association, Washington, D.C. (Oct. 2022)*

Clemson University Finance Department Seminar, Clemson, SC (Sep. 2022)

Penn State University, Department of Risk Management, Virtual Seminar (Sep. 2022)

Federal Reserve Bank of Atlanta, Atlanta, GA (Sep. 2022)*

AREUEA-AsRES Conference, Tokyo, Japan (Aug. 2022)*

AREUEA International Conference, Dublin, Ireland (July 2022)*

- Best Paper Award

ESCP-TAU-UCLA Conference on Low-Income Housing Supply and Housing Affordability, Tel Aviv, Israel (Jun. 2022)

The Real Estate Research Institute, Chicago, IL (May. 2022)

American Real Estate Society's 38th Annual Meeting, Bonita Springs, FL (Apr. 2022)

APPAM Fall Research Conference, Austin, TX (Mar. 2022)*

AREUEA/Allied Social Science Association Meeting, Boston, MA (Jan. 2022) *

North American Regional Science Association Meetings, Denver, CO (Nov. 2021)*

Financial Management Association Annual Meeting, Denver, CO (Oct. 2021)*

The 1st International Conference on Artificial Intelligence for Real Estate hosted by San Diego State University and Santa Clara University, Virtual, (Oct. 2021)

Massachusetts Institute of Technology, MIT Center for Real Estate, Virtual Seminar (Sep. 2021)*

AREUEA International Conference, Virtual (July 2021)*

Penn State University, Department of Risk Management, Virtual Seminar (Jan. 2021)*

Louisiana State University, Department of Finance, Virtual Seminar (Oct. 2020)*

GSSI – Gran Sasso Science Institute Seminar Series, Virtual Seminar (Sep. 2020)*

Cambridge Real Estate Seminar series, Virtual Seminar (Aug. 2020)*

Annual Clemson University AI Symposium, Virtual Seminar (Apr. 2020)

The FSU-UF-UCF Real Estate Symposium, Panama City Beach, FL (Apr. 2020)

Santa Clara University, Department of Finance, Santa Clara, CA (Feb. 2020)

AREUEA/Allied Social Science Association Meeting, San Diego, CA (Jan. 2020) (×2)

The 2019 Rental Housing Conference, Federal Reserve Bank of St. Louis, St. Louis, MO (Dec. 2019)*

Zicklin School of Business, Baruch College, New York City, NY (Oct. 2019)

University of Cambridge| University of Florida| National University of Singapore
Real Estate Finance and Investment Symposium, Cambridge, UK (Sep. 2019)*

AREUEA International Conference, Milan (2019) (×2)

Renmin University, Beijing, China (2019)*

The Homer Hoyt Meeting, West Palm Beach, FL (2019)

American Real Estate Society’s 35th Annual Meeting, Paradise Valley, AZ (2019) (×2)
- Single Author Winner of the Manuscript Prize in “Real Estate Valuation”

University of Connecticut, Finance Department, Storrs, CT (2019)

Federal Reserve Bank of Philadelphia, Philadelphia, PA (2019)

AREUEA/Allied Social Science Association Meeting, Atlanta, GA (2019)

Federal Reserve Bank of Atlanta, Atlanta, GA (Sep. 2018)

Southern Finance Association annual meeting, Asheville, NC (2018)*

Federal Reserve Bank of Cleveland, Cleveland, OH (Aug. 2018)

Federal Reserve Bank of Cleveland, Cleveland, OH (Jun. 2018)

Energy and Commodity Finance Conference, Rome (Jun. 2018)

Clemson University Finance Department Seminar, Clemson, SC (2018)

American Real Estate Society's 34th Annual Meeting, Bonita Springs, FL (2018)

AREUEA International Conference, Amsterdam (2017)

AREUEA National Conference, DC (2017)

American Real Estate Society's 33rd Annual Meeting, San Diego, CA (2017)

Southern Finance Association Annual Meeting, San Destin, FL (2016)

Financial Management Association Annual Meeting, Las Vegas, NV (2016)

Energy and Commodity Finance Conference, Paris (2016)

American Real Estate Society's 31st Annual Meeting, Ft. Myers, FL (2015)

(* indicates presentation by co-author)

Other Invited Talks

Financial Impact of COVID-19 Information Session with Dean York (April 2020)

–I Provided a 75-minute talk about the outlooks on mortgage foreclosures, unemployment, housing demand, and potential inflation concerns to Alumni and Donors of the Clemson College of Business

TigerSphere Workshop-AI for Good, Watt Family Innovation Center, Clemson, SC (April 2023)

–I introduced applications of Machine Learning in Finance. The event is open to the university faculty, staff, and students, with over 200 registrations.

Research and Publications

Journal Publications

Bracketed ratings are from the 2025 ABDC Journal Quality List (A* = highest tier): four A*, three A, two B.

"The Double Trigger for Mortgage Default: Evidence from the Fracking Boom," with Chris Cunningham and Kristopher Gerardi 2021 (*Management Science* [ABDC A*], 67(6), 3943-3964).

– Our results show that homeowners exposed to fracking were significantly less likely to default on their loans. Instrumenting for fracking increases the magnitude of the effect appreciably consistent with underlying endogeneity in the location of drilling activity. The fracking measures most associated with the labor-intensive act of creating wells have the largest net effects. Furthermore, we show that fracking activity significantly increased employment growth at the county level. These results are consistent with the double-trigger theory of mortgage default which contends that liquidity shocks in addition to negative equity drive borrowers to default due to their inability to afford payments nor sell their homes.

"Information in Financial Contracts: Evidence from Securitization Agreements" with Ambrose, Han, and Korgaonkar (*Journal of Financial and Quantitative Analysis* [ABDC A*], 59(4), 2024, 1692–1725.)

–We introduce a novel application of machine learning to compare Pooling and Servicing Agreements (PSAs) that govern commercial mortgage-backed securities (CMBS). In contrast to the view that the PSA is largely boilerplate text, we document substantial variation across PSAs, both within- and across-underwriters and over time. A part of this variation is driven by differences in loan collateral across deals. Additionally, we find that differences in PSAs are correlated with ex-post loan and bond performance. Collectively, our analysis suggests the importance of examining the entire governing document, rather than specific components, when analyzing complex financial securities.

"Information Value of Property Descriptions: A Machine Learning Approach" with Stephen Ross 2021 (*Journal of Urban Economics* [ABDC A*], 121, 103299.).

–This paper employs machine learning to quantify the value of "soft" information contained in real estate property descriptions. Textual descriptions contain information that traditional hedonic attributes cannot capture. A one standard deviation increase in the uniqueness of a property based on this "soft" information leads to a 15% increase in property sale price in a hedonic price model and a 10% increase in a repeat sales price model. An annual hedonic price index ignoring our measure of unobserved quality overstates real estate prices by between 10% to 23% and mistimes the stabilization of housing prices following the Great Recession. Similar, but smaller effects, are observed for the repeat sales price index.

"Tenant Rights, Eviction, and Rent Affordability" with Edward Coulson, Thao Le, and Victor Ortego-Marti, 2025 (*Journal of Urban Economics* [ABDC A*], 147, 103762)

–We use state-level differences in the legal relationship between landlords and tenants to estimate the impact of these differences on housing markets. We construct a search-theoretic model of landlord and tenant search and matching, which predicts that an increase in the cost of eviction reduces the number of evictions, but raises rents and homeless rates, and lowers housing supply and vacancy rates. To test these predictions, we construct an annual index to measure the level of the legal protection of tenant rights in each state. Our instrumental variable results indicate that while a one-unit increase in the Tenant-Right Index reduces the eviction rate by 0.32 percentage points, rental housing is 1.8 percent more expensive in areas where tenants have more protections against landlords. A higher Tenant-Right Index is also associated with a decrease in housing supply and an increase in the homeless rate. Taken together, our findings highlight a significant trade-off between tenant protections and rent affordability. Thus the welfare effects of tenant rights depend on the presumably large benefits for those who avoid eviction versus a loss of consumer surplus for other housing consumers.

"Cleanliness is Next to Income: The Impact of COVID-19 on Short-Term Rentals" with Sean Wilkoff 2022 (*Journal of Regional Science* [ABDC A], 62(3), 799-829)

–Featured by The Economist Dec. 2020

– We use Airbnb data from Austin, Texas to empirically investigate the impact of the onset of Corona Virus Disease 2019 (COVID-19) on the short-term rental market. Specifically, we employ a machine learning algorithm to create an extensive cleanliness dictionary to detect whether an Airbnb unit is clean. We use a difference-in-difference specification to value the change in income related to reviewer perceived cleanliness during the COVID-19 pandemic. We find the following results: First, available listings declined by 25% once the pandemic hit and those that remained lost 22% of their income and had occupancy decrease by 20%. Second, properties that were perceived to be clean increased their income by 17.5% and their occupancy by 16.5%, mitigating the negative shock due to COVID-19. Third, rental prices for clean Airbnb listings did not increase after COVID-19. In addition, we study the interaction of Airbnb supply on the long-term rental market during a market decline.

"Past Experiences and Investment Decisions: Evidence from Real Estate Markets" with Brent Ambrose, 2023 (*Journal of Real Estate Finance and Economics* [ABDC A], 66(2), 300–326.).

– This paper investigates how market participants form their risk perspectives about the real estate market through a sequence of information shocks. Guided by a theoretical Bayesian learning model, we exploit a natural experiment afforded by the fracking boom in Pennsylvania in the late-2000s. We empirically examine whether familiarity with conventional gas explorations affects home-buyers' willingness to pay for houses near fracking wells.

"Economies of Scale and the Operating Efficiency of REITs: A Revisit" with Michael Highfield and Thomas Springer (*Journal of Real Estate Finance and Economics* [ABDC A], 62(1), 2021, 108–138.)

– Building on past research in the economies of scale debate, and recognizing the substantial changes in this industry since the turn of the millennium, we use a time-varying stochastic frontier approach to monitor changes in REIT efficiency over the 2001–2015 period. While the stochastic frontier model

suggests that the overall level of operating efficiency for US equity REITs is stable, using a series of linear models we document evidence that economies of scale still exist in this industry.

“The Odd One Out? The Impact of Property Uniqueness on Selling Time and Selling Price” with Thomas M. Springer, 2022 (*Journal of Housing Research* [ABDC B] Best Paper Award, 2022 Volume)

–We employ machine learning to develop measures of residential real estate uniqueness from written advertisements. These measures are exogenous from sales prices. We distinguish the effect of market uniqueness (compared to houses for sale at the same time) from the effect of universal uniqueness (compared to houses in the same sub-market) on sale prices and time-on-the-market (TOM). The hedonic models show that a one standard deviation increase in market uniqueness leads to a 13% (\$48,490) increase in sale prices at the cost of delaying the transaction for 1.7 days, whereas a one standard deviation increase in universal uniqueness only leads to an 11% (\$41,030) increase in sale prices at the cost of delaying the transaction for 3 days. We validated the impact of uniqueness on TOM using two hazard models. Our results highlight the importance of uniqueness and market timing in real estate.

“The More, the Merrier: Agent Connectedness in Real Estate Trading Networks,” with Xiaojin Sun, 2025 (*Journal of Real Estate Research* [ABDC B], 47(2), 149–169).

–This study applies network theory to examine how real estate agents’ connections influence transaction outcomes, using data from over 40,000 sales in Atlanta, GA. It finds that agents with stronger networks achieve higher sales prices, with a one standard deviation increase in connectedness leading to a 2.61% price boost. These well-connected agents sell unique properties faster and more accurately price them, suggesting that their networks enhance market efficiency through improved information flow.

Major or Minor Revisions

“The Good, the Bad and the Ordinary: Estimating Agent Value-Added using Real Estate Transactions” with Chris Cunningham and Kristopher Gerardi, 2024 (Major Revision at *Management Science* [ABDC A*])

–We recover measures of real estate agents’ value added in the housing transaction process using a detailed Multiple Listing Services (MLS) property transactions database covering three large metro areas. Controlling for property and location characteristics. We find considerable heterogeneity in the sale prices obtained by realtors as well as the time that it takes to complete a sale. Focusing on a sample of repeat sales, we estimate an inter-quartile price range for both listing and buying agents to be approximately 4 to 5 percent. The inter-quartile range for days-on-the-market is between 15 and 25 days. Furthermore, we find listing agents that tend to sell for a premium do not take any longer to sell, indicating that agents do not have fixed price posting/acceptance strategies. Agents that sell homes at a premium also tend to pay more when acting as a buyer’s agent, which is inconsistent with realtors being good negotiators. Finally, we document that homes sold via a “flat-fee” agency on the MLS, obtain prices that are 1%–5% *higher* compared to those obtained by a traditional listing agent and take no longer to sell.

Working Papers

“Who Prices Flood Risk and When: Evidence from Housing Markets,” with Sirui Cai, 2025 (invited submission to the *Journal of Real Estate Research*; currently under review).

– We examine how housing and mortgage markets adjust to the National Flood Insurance Program’s Risk Rating 2.0 reform in Florida, which replaced community-based flood insurance rates with property-specific premiums based on advanced risk models. We find that properties in tracts facing larger premium increases experienced an average 2 percent decline in sale prices and a 1 percent drop in loan approval rates, concentrated in high-risk and lower-income areas. The effects are stronger where households rely more on federally backed or non-bank lending, and non-bank lenders respond by raising rates and securitizing a greater share of loans, suggesting that financial intermediaries transmit newly revealed climate risk into property values and credit supply.

“Cheap Talk or Priced Information? Listing Language and Housing Transaction Outcomes,” 2026 (Working Paper; posted on SSRN, July 2026).

- Uses AI-assisted, auditable text measures from 63,067 Atlanta MLS transactions to study how verifiable disclosure, adverse information, and seller urgency are reflected in list prices, sale prices, bargaining outcomes, and marketing time.

“Political Alignment and Neighborhood Choice Among Homebuyers,” with Sirui Cai, Yongqiang Chu, and Thao Le, 2026 (Working Paper).

- We study the impact of buyers’ political identity on home purchasing using North Carolina voter records linked to more than 250,000 housing transactions and over six million comparable MLS listings. Using a Bartik-type shift-share IV framework, we find that buyers are significantly more likely to purchase homes in politically aligned neighborhoods, with alignment increasing purchase probability by about 1.58 percentage points relative to a 3 percent baseline. The effect is strongest among Republican buyers and declines sharply from 2010 to 2019 despite rising national polarization.

“From Foreign Geopolitical Risk to Local Housing Markets: The Geography and Consequences of Manufacturing Reshoring in the U.S.,” with Brent Ambrose, Xiaojin Sun, and Zhenzhen Yan, 2026 (Working Paper).

- Links reshoring announcements from the Reshoring Initiative to origin-country geopolitical risk and local ancestry ties to map where reshored production lands, then traces its consequences for county employment, establishments, house prices, and commercial rents. Supported by an \$85,000 Coccoziello Institute seed grant.

“Impact of High-Skill Jobs On Commercial Real Estate” with Sumit Agarwal and Brent Ambrose, 2022

- Job vacancies and labor demand are among the most critical drivers behind the value of local commercial properties. Using 4.8 million job advertisements from more than 40,000 career websites from 2010 to 2020, we measure labor demand trends within metro areas and assess their impact on CRE rent levels. We build time-varying measures for the demand of workers of high and low machine replacement risk and achieve identification by relying on the cross-sectional differences of tenants and property types to changes in labor skill demand. We document a positive relationship between employment growth and lease rates. For industrial properties, tenants who seek talents one year before the lease was signed pay 9.1% more than similar tenants who did not advertise any job vacancy. Meanwhile, office tenants who seek talents one year before pay 3.2% higher effective rents than tenants who did not announce any position. Those differences in rent levels are mainly driven by the demand for high-skill laborers that machines cannot replace.

“Soft Information and Price Discovery in Illiquid Asset Markets: Evidence from Housing,” 2026 (Working Paper).

- Examines whether listing-stage language reveals local supply pressure before transaction-based price indices update, separating observable distress composition from residual soft information.

“Listing Language and House Price Discovery,” 2026 (Working Paper).

- Builds a real-time housing-market information index from more than two million MLS listings, measuring demand heat, seller pressure, and asset frictions and validating the signals across the Carolinas and Georgia.

Research in Progress

“Generative AI and Consumer Recourse in Financial Markets,” with Thao Le, 2026.

- Studies whether AI-assisted complaint preparation improves access to financial redress, particularly for consumers facing language, education, and financial-literacy barriers; current work focuses on a causal field-intervention design.

“Real Estate Expertise within Banks and Commercial Real Estate Loan Outcomes,” with Ernesto Aldana, 2026.

“Peer Effect Across Groups: Evidence from the Mortgage Market,” with Yongqiang Chu, Sirui Cai, and Thao Le, 2024.

“Tenant Rights Index and Labor Market Outcomes” with Edward Coulson, Thao Le, and Victor Ortego-Marti, 2024.

“Location Proximity and Soft Information in Residential Mortgage Lending: Evidence from Shale Gas Regions” with Brent Ambrose.

Copyright

“A Natural Language Processing Model for House Price Forecasting Using Text Analysis from House Description,” Shen and Han, Copyright 2018 Clemson University, Technology disclosure filed # 2018-034

Media Coverage

1. *“A Commercial Real Estate Collapse Might be Looming. So why is South Carolina not Worried?”*
South Carolina Public Radio, July 2024
2. *“How AI is Revolutionizing Home Buyers’ Access to Housing Market Insights”*
WBTW (CBS), March 2024
3. *“A Unique Home Might Take Longer to Sell, but the Payoff Could be Worth a Few Extra Days on the Market”*
Clemson News Stand, July 2023
4. *“Owners Vs. Agents: Who Sells More”*
The Washington Post, Dec. 2022 || Federal Reserve Bank Policy Hub, Sep. 2022 || Due Diligence, Mar. 2023
5. *“COVID-19 Mortgage Relief-The Role of Income Support”*
Federal Reserve Bank Policy Hub, May 2020
6. *“Airbnb Guests Seek Out Cleaner Properties in the Pandemic”*, Dec. 2020
NEWSTRAL || The Economist || Nevada Today || ABC News
7. *“Tight Landlord Regs May Result in Homelessness Rise, Clemson Study Says”*, Jul. 2020
Clemson University News Stand || ABC News || GSA Business || News Break || SC BIZ News ||
8. *“Clemson Study Employs AI to Decipher ‘Soft’ Features of a Home’s Value”*, Feb. 2020
Decipher Magazine || Clemson University News Stand || Softbank Groups
9. *“Clemson Study Shows Fracking Resulted in Lower Mortgage Defaults”* Sep. 2016
Clemson University News Stand || Pittsburgh Business Times || Ohio Gas & Oil Magazine ||
Natural Gas Now || Energy in Depth || Heart Land || Time Daily || Marcellus Coalition ||
Vets4energy

Referee Work

Real Estate Economics, 2013 - Present | Management Science | Journal of Urban Economics | Journal of Regional Science | Regional Science and Urban Economics | Journal of Real Estate Finance and Economics | Journal of Real Estate Portfolio Management | Financial Management | The Journal of Credit Risk | International Real Estate Review | International Review of Economics and Finance | Empirical Economics | Journal of Housing Research

Professional Associations and Services

Membership Committee: AREUEA 2024 to 2026

Program Committee: 2027 W. P. Carey Real Estate Research Conference, Arizona State University (inaugural) | 2024 AREUEA National Conference | 2022 Midwest Finance Association Annual Meeting | 2021 Financial Management Association Annual Meeting | 2016 Southern Finance Association Annual Meeting

Session Chair: 2025 AREUEA Annual Conferences | 2024 AREUEA National Conferences | 2022 AREUEA International Conferences | 2020 Real Estate Research Virtual Symposium sponsored by the Institute for Private Capital, University of North Carolina, Chapel Hill | 2016 SFA Annual Meeting

Member of AEA, AFA, AREUEA, FMA, ARES

College and Department Services

Powers College of Business Representative, Clemson University Research Impact Academy (inaugural cohort), 2026–2027

Member, Powers College of Business Research Working Group (research funding and research strategy), convened by the Associate Dean of Research, 2026–present

AI Task Force, 2025–present

Ad Hoc Member, Real Estate Lecturer Recruiting Committee, 2025–2026

Reviewer, Clemson Finance Research Conference, 2026 (reviewed five of 47 submissions)

Committee on Undergraduate Studies (CUGS), Undergraduate Grievance Committee, and Finance recruiting, seminar, and curriculum committees, 2025–present

Former Faculty Adviser, Clemson Real Estate Club (through 2022)

Developed a national benchmark of more than 60 university real estate centers and a donor-facing proposal for a real estate finance and investment institute, 2026

Proposed and advanced planning for a faculty-led real estate study-abroad program in London and Cambridge, UK, 2026

Designed and delivered “Your First AI Agent,” a hands-on workshop on AI research agents for College of Business faculty and staff, Sep. 2026

Faculty Hiring Committee Chair (Real Estate), 2023, 2024 || Faculty Hiring Committee (Finance), 2022, 2023, 2024

Computer Skills

ArcGIS, R, Stata, Matlab, SAS, LaTeX, Python

Data Experience

Blackbox Logic (BBx), CoreLogic Public Record Data, CRISM, The Home Mortgage Disclosure Act Data (HMDA), Lender Processing Services (LPS) Mortgage Performance, Multiple Listing Service (MLS)

Selected Student Mentee

Dylan Brown (2018) Amazon || Matthew Setzer (2019) Mailprotector || Megan Quinan (2020) Truist Financial Corporation || Sean Larkin (2021) Cisco || Max Koch (2021) Lovelytics || Nguyen Lam (2021) Graduate || Jack Lillig || James Buba || Jack Maggard (2021) Deloitte Consulting

References

Dr. Brent Ambrose, Smeal College of Business, Penn State, bwa10@psu.edu

Dr. Edward Coulson, University of California, Irvine, ncoulson@uci.edu

Dr. Kris Gerardi, Federal Reserve Bank, Atlanta, kristopher.gerardi@atl.frb.org

<https://sites.google.com/g.clemson.edu/lily-shen/home>