

Jonathon Carrasco

ADJUNCT PROFESSOR • LONE STAR COLLEGE

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Education

University of Houston

M.A. IN ECONOMICS

Houston, TX

May 2016

M.S IN FINANCE

December 2013

Rice University

B.A. IN MATHEMATICAL ECONOMIC ANALYSIS WITH HONORS

Houston, TX

May 2006

Teaching Experience

Lone Star College

MICROECONOMICS

Cypress, TX

January 2014 - Present

- Face-to-Face: Spring 2014, Summer 2014, Fall 2014, Spring 2015, Summer 2015, Fall 2015, Spring 2016
- Online: Summer 2015, Fall 2015, Spring 2016, Fall 2016, Spring 2017, Summer 2017, Summer 2020, Spring 2021, Spring 2022, Fall 2023, Spring 2024, Summer 2024, Fall 2024, Spring 2025

Lone Star College

MACROECONOMICS

Cypress, TX

January 2014 - Present

- Face-to-Face: Summer 2014, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Spring 2020
- Online: Spring 2015, Fall 2016, Summer 2017, Fall 2017, Spring 2018, Summer 2018, Fall 2018, Spring 2019, Summer 2019, Fall 2019, Spring 2020, Summer 2020, Fall 2020, Summer 2021, Fall 2021, Spring 2022, Summer 2022, Fall 2022, Spring 2023, Summer 2023, Fall 2023, Spring 2024, Summer 2024, Fall 2024, Spring 2025

University of Houston

TEACHING ASSISTANT

Houston, TX

August 2008 - May 2013

- Energy Insurance and Risk Management: Spring 2009, Spring 2010, Spring 2013
- Fixed Income: Spring 2010, Spring 2011, Spring 2012
- Corporate Finance: Summer 2011

Professional Experience

Avison Young

GLOBAL LEAD, BUSINESS INTELLIGENCE

Houston, TX

March 2024 - Present

Meow

Madison Marquette

VICE PRESIDENT, FINANCIAL PLANNING & ANALYSIS/DATA ANALYTICS

DIRECTOR, DATA ANALYTICS

ASSOCIATE DIRECTOR, RESEARCH AND DATA ANALYTICS

Houston, TX

May 2022 - January 2024

May 2021

September 2019

Financial Planning & Analysis

Responsible for the production of comprehensive annual budgets, revenue forecasts, and financial planning across all verticals. My work has primarily focused on process improvements to automate the flow of data and generation of downstream reports to cut down reporting time to hours instead of days. While in my role, I've built a suite of custom tools using Python to facilitate the ETL process that bridges our raw financial data from Yardi into our financial performance management software Prophix. There I collaborate with corporate accounting leadership to build financial models and bespoke reports to provide actionable insight to executive leadership. I also participate in the financial analysis and due diligence process during our M&A negotiations by analyzing financial statements, evaluating valuation models, and forecasting revenue scenarios.

Data Analytics / Research

Spearhead the automation of routine tasks where possible to ensure that reports and analytics produced by our finance and research teams are reliable, timely, and accurate. Using my software development skills, I have built custom applications that are able to take over the collection and quality assurance of datasets and return standardized charts and tables that allow for on demand finance and research reporting. As an example, we are often first to report on Retail Sales released by the Census because I built an application that downloads raw sales data using an API call, calculates a series of summary statistics, and then generates an Excel file with key tables and graphs formatted and ready for use in presentations.

Developed a suite of interactive dashboards that generate historical studies on vacancy, availability, absorption, and leasing activity to be conducted on-the-fly for quick identification of trends. These dashboards can be printed out for distribution using a traditional slideshow format or they can be published online to allow for a conversation driven presentation of the data. I have also built an ecosystem of quarterly market and submarket reports using business intelligence tools like Tableau supported by computer programs written in Python to conduct routine analysis and data integrity checks.

Data Management

Data analytics are only as good as the infrastructure supporting them. To deliver best in class analytics, I have built a set of tools that allow third party market data and demographics to be linked to proprietary lease/sale comp, tenant, and availability information. With this structure in place, I am able to create research products that can be quickly refreshed which ensures new intelligence is always available and reports are never stale. Using these tools, I have been able to track the Madison Marquette portfolio of assets and properties serviced. By linking internal and external datasets, I have been able to provide a real-time view into our portfolio with key performance indicators from otherwise siloed information.

CBRE

SENIOR ANALYST, DATA INTELLIGENCE

ANALYST, DATA INTELLIGENCE

Houston, TX

March 2019 - September 2019

September 2016

Applications and Dashboards

Dashboards I built in Tableau and R were featured by CBRE Research as a Global Best Practice. I was invited on many occasions to teach advanced Tableau training sessions to my research peers across the company. Interactive portfolios, maps, and skylines I designed were featured in point-of-sale presentations and pitches in the office, retail, and multifamily lines of business. A quarterly Office and Industrial Market Share dashboard I built was adopted by the Managing Directors of the South-Central Region.

Data Management

Under my leadership, the Digital Intelligence team improved the quantity and quality of information captured in their proprietary database of lease comps and property data. Custom scripts I wrote in Python and Excel enabled our team to capture internal comp information in half the time and deliver an on-the-fly customized report to both brokers and management. My efforts to standardize and automate data collection by scraping websites and utilizing APIs allowed the research team to circulate market reports and present economic data each quarter without production lag.

Point of Sale

I was often invited to present my data visualizations and analysis in client briefings and at the point of sale in both Agency and Occupier pitches. The ability to work alongside a team of brokers allowed me to ensure that the analysis presented was tailored to the question at hand and in step with the overall vision the team was advocating. Because of my background in economics, I was called on to speak with authority on broader market trends and macroeconomic indicators by delivering a quarterly overview of the Houston economy and office market in the Office, Industrial, and Debt and Structured Finance lines of business meetings.

Lone Star College

ADJUNCT PROFESSOR, ECONOMICS

Cypress, TX

January 2014 - Present

I currently teach three-hour introductory Microeconomic and Macroeconomic classes in both a face-to-face and online setting. I am responsible for constructing a course syllabus, writing exams, and maintaining an online classroom complete with discussion boards, case studies, and weekly homework assignments to supplement coursework. Courses taught are credit-bearing and the college is accredited by the Southern Association of Colleges and Schools Commission on Colleges.

University of Houston

RESEARCH AND TEACHING ASSISTANT

Houston, TX

August 2008 - May 2016

Data collection, ETL, data management, and econometric analysis for academic research and publication. Experience working with NYSE high-frequency trade and quote data, commodity market futures and spot prices, and geospatial datasets.

Responsible for teaching and grading undergraduate (Principals of Financial Management) and MBA graduate courses (Corporate Finance, Fixed Income, Energy Insurance and Risk Management) at the Bauer College of Business. Received the Clay and Lucy Carter Teaching Excellence Award.

The Methodist Hospital

SENIOR RESEARCH TECHNICIAN

Houston, TX

May 2005 - August 2008

Fellowship to study how patients make medical decisions under severe uncertainty. Developed mathematical models to use biometric data and help patients discover their personal normals and provide feedback to manage chronic disease. Awarded a fellowship to apply six-sigma principles to study blood bank procedures and develop more robust methods. Produced "In Context" a biweekly podcast with Dr. Clifford Dacso on current medical news. Published a peer-reviewed article on uncertainty in medicine and presented research at conferences in the US and abroad.

Technical Expertise

App Development

Languages Python • R • JavaScript • Stata • Matlab **ETL** SQL • Alteryx • FastAPI

Dashboards Microsoft Power Apps • Streamlit • Shiny • Tableau • Microsoft Power BI

Business Intelligence

Applications Prophix • Datex • Costar • ArcGIS Business Analyst • Real Capital Analytics

Reporting Adobe InDesign • HTML & CSS • Excel Macros and Pivot Tables • \LaTeX **Spatial** ArcGIS • QGIS • Placer.ai

Machine Learning / AI

Linear Regressions • Maximum Likelihood Estimation • Logit & Probit Models • ARIMA Models with Trend • GARCH

Models • Bayesian Analysis • Markov Chain Monte Carlo Simulation • Identification of Structural Breaks • Regression

Discontinuities • Spectral Analysis • Jackknife & Bootstrap Resampling • Neural Networks • Web Scraping

Selected Coursework

Economics

Macroeconomic Modeling & Forecasting • Applied Econometrics • Urban Economics • DSGE Models • Monetary Policy •

International Monetary Economics

Finance

Options & Futures • Fixed Income Securities • Continuous Time Finance • Financial Management • Financial Econometrics •

International Finance & Macroeconomics

Research

A Hedonic Model of Home Prices in Houston

University of Houston

URBAN ECONOMICS

May 2016

Used Harris County Appraisal District data along with demographic and neighborhood characteristics obtained from the U.S. Census to build models of single family home prices in Houston.

Drought and the Influence of Water Wells on Crop Selection

University of Houston

INDEPENDENT RESEARCH

November 2015

Used USDA satellite data and drought maps to analyze how access to deeper water wells can influence crop selection in drought years.

Revised Expectations and Agricultural Futures Prices

University of Houston

INDEPENDENT RESEARCH

May 2013

Extracted USDA forecasts of crop yields to study how updated expectations are incorporated into agricultural futures prices.

Heterogeneous Uncertainties in Cholesterol Management

The Methodist Hospital

PUBLISHED: INTERNATIONAL JOURNAL OF APPROXIMATE REASONING

2009

A study to explore the robustness of clinical guidelines used by physicians when managing a patient's cholesterol levels. Demonstrate that strict adherence to guidelines are sometimes, but not always, consistent with the expected utility expressed by a patient.

Poster Presentations

Improving Chronic Disease Outcomes by Technology and Community-based Intervention at Scale

Irvine, CA

THE FUTURE OF HUMAN HEALTHSPAN CONFERENCE

November 2007

Robust-Satisficing Decision Making Under Severe Uncertainty Illuminates Patient Choice

Boston, MA

SOCIETY FOR MEDICAL DECISION MAKING CONFERENCE

October 2006

Information-Gap in Medical Decisioning

Newcastle upon Tyne, UK

INFORMATION GAP CONFERENCE AT UNIVERSITY OF NEWCASTLE-UPON-TYNE

September 2005

Community and Classroom Presentations

An Introduction to the Economics of the US Healthcare System

Houston, TX

UNIVERSITY OF HOUSTON, EXPERIENCING THE FUTURE OF HEALTH

January 2008

Understanding the US Healthcare System

Houston, TX

UNIVERSITY OF HOUSTON, EXPERIENCING THE FUTURE OF HEALTH

March 2007

Service

2021	Rice University 15 Year Reunion Committee , Member – Baker College	Houston, TX
2018-2019	CBRE Cares Houston , Chairman – Finance Subcommittee	Houston, TX
2005-2006	Treasurer , Rice University – Baker College	Houston, TX
2005	Orientation Week Coordinator , Rice University – Baker College	Houston, TX
2003-2005	Educational Vice President , Rice University – Baker College	Houston, TX

Honors & Awards

2009	Clay & Lucy Carter Teaching Excellence Award , C.T. Bauer College of Business, University of Houston	Houston, TX
2008	Dyer Fellowship for Improving Patient Care Through Research , The Methodist Hospital	Houston, TX
2006	Philpott Award for Service to Baker College and Rice University , Rice University	Houston, TX
2005	Finger Fellowship for Sustainable Health , The Methodist Hospital	Houston, TX
2002	Barbara Jordan Scholar , Rice University	Houston, TX