

Matt Brigida

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EDUCATION:

Florida Atlantic University, Boca Raton, FL

- Ph.D. in Finance, December 2009, GPA: 3.82/4.0
- MS Economics, 2004, GPA: 3.8/4.0
- Additional Coursework: 12 graduate and 33 undergraduate Mathematics credit hours, GPA: 3.84/4.0
- Honor Societies: Beta Gamma Sigma, Phi Kappa Phi, and Omicron Delta Epsilon (Economics).

Loyola University of Maryland, Baltimore, MD

- BBA, 2000.

EXPERIENCE:

SUNY Polytechnic Institute, Utica, NY

1/2018—present

Associate Professor of Finance (tenured)

Clarion University of Pennsylvania, Clarion, PA

8/2009—1/2018

Associate Professor of Finance (tenured)

- Teach undergraduate and graduate courses in Finance and Financial Analytics, and graduate courses in Data Analytics.
- Created Masters in Data Analytics program.
- Created and administer 2 PostgreSQL databases (hosted on Amazon AWS), (1) Freddie Mac loan-level mortgage files and (2) hourly PJM electricity prices and FTR auction values by network node.
- Anomaly detection in time series via Kalman filters, Markov-Switching models, and neural networks.
- Built the NG orderbook from CME FIX/FAST messages (time-stamped to the nanosecond) using sed, perl, and Python.

Huntington Bank, Columbus, OH

10/2022—5/2023

Treasury Analytics and Modeling Manager/Consultant

- Created a model to predict 30 and 15 year PMMS rates in Python (using an Asymmetric TVECM) and implemented it in QRM.
- Calculated balance sheet impact from switching from short-rate models to the LIBOR Market Model.

Milken Institute, Center for Financial Markets, Washington, DC

10/2014—7/2021

Financial Education Advisor

- Created web applications (using Javascript and Python/R), one of which [modeled the decision to purchase a house](#).
- Modeled a special purpose vehicle backed by equity investments in various pharmaceutical patents.

NextEra Energy, NextEra Energy Resources, Juno Beach, FL

2/2009—7/2009

Business Management Analyst/Consultant

- Calculated the real option value of natural gas fired generation assets to assist electricity forward sale decisions and set asset optimization budgets. The pricing was done by applying Monte Carlo to a spread option where the two underlyings were mean-reverting stochastic processes with price proportional volatility.
- Determined profitability drivers of wind farms.
 - Software used: SAP ERP Financials, Oracle databases, R, Excel, Access, some SQL query writing.

Florida Atlantic University, Boca Raton, FL

1/2006—5/2009

Finance Instructor & Research Assistant

- Modeled time series and volatility (including ARCH/GARCH models with endogenous regime-switching and a GJR leverage effect), and implemented conditional autoregressive Value-at-Risk .
- Priced options with Stochastic Volatility models (including Heston calibration).

World Omni Financial Corp. (Southeast Toyota Finance), Deerfield Beach, FL

12/2004—1/2006

Senior Modeling Analyst

- Created a nested Logit model to estimate delinquency and default probabilities for multi-billion dollar portfolios of auto loans and leases.
- Priced the option sold in our auto leases.
 - Software used: SAS, Excel, Access, SQL query writing.

TECHNICAL SKILLS:

Software: Python, R, SQL, UNIX/Linux, C++, L^AT_EX, QRM, Machine Learning/JAX/Pytorch, Javascript, SAS, Advanced Excel, Access, Emacs Lisp

Databases & Data Formats: Oracle, PostgreSQL, MySQL, JSON, FIX and CME FIX/FAST Protocols