# Jared D. Berry

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### Education

2019 Data Science Certificate, Georgetown University, Washington, DC.

(Anticipated)

Master of Arts, International Economics and Finance (MIEF), Johns Hopkins 2016-2017

University, School of Advanced International Studies, Washington, DC.

Cumulative GPA: 3.97, with Distinction; STEM-Accredited in 2018

2011–2015 **Bachelor of Arts, Economics**, *Capital University*, Columbus, OH.

Cumulative GPA: 3.99, Honors, Summa cum Laude

## Experience

2017-Present **Senior Research Assistant**, Federal Reserve Board of Governors, Washington, DC.

- o Operationalized and automated use of daily bank balance sheet data to monitor balance sheet normalization using R, developing all data manipulation and visualization infrastructure
- Automated multiple preexisting section production items end-to-end from initial data munging to visualization and analysis using R, Python and bash scripting/crontab
- Led onboarding of division research assistants with intensive introduction to the Board workflow and development environment, particularly using the R programming language
- Engineered proxy features for bank lending standards and implemented parallelized machine learning algorithms (GBM and Random Forest) on a SLURM scheduler to predict future standards and establish variable importances
- Wrote and optimized code to operationalize weekly branch-level deposit rate data and built out analytics and visualization for monitoring using R (dplyr and ggplot2) and PostgreSQL
- Developed a monitor for bank earnings expectations using Thomson Reuters I/B/E/S data, tapping into data pipelines with Python and PostgreSQL and building out visualizations in R
- Led the overhaul of production pipeline to reliably process quarterly Senior Loan Officer Opinion Survey (SLOOS) data, incorporating robust error-handling and version control
- Co-authored FEDS Note on changes in net interest margins (NIMs) at banks relative to monetary policy tightening implementing decompositions using bank balance sheet data in R
- Acted as lead RA for three SLOOS rounds, processing all micro data, liaising with system-wide survey teams to coordinate releases, and building out analytics and visualizations
- Conducted extensive first-pass regression analysis in Stata to assess the impact of capital requirements on high volatility commercial real estate lending

2018-2019 Adjunct Lecturer, Johns Hopkins University, Washington, DC.

- Coordinated and led an intensive introductory course in the R programming language for 30+ master's degree students in the MIEF program Winter Intercession
- o Created course materials in R Markdown to cover foundations, data visualization, and data manipulation/wrangling with Tidyverse packages using the RStudio IDE

- 2017 Teaching Assistant-Missaka Warusawitharana & Jaime Marquez, Johns Hopkins University, Washington, DC.
  - Coordinated and led review sessions for Quantitative Methods course for MIEF 2017-2018 cohort, covering OLS, logit and probit models, instrumental variables, introductory time-series analysis, and panel-data analysis
  - o Coordinated and led review sessions for mid-career professionals in international monetary policy and banking as part of the Global Policy Practitioners program, covering economic monitoring, interest rate determination, and unconventional monetary policy

## 2016-2017 Research Assistant-Jaime Marquez, Johns Hopkins University, Washington, DC.

 Conducted analysis to determine interest rate regime interdependency across developed economies by modeling interdependent Taylor Rules with Full-Information Maximum Likelihood models (using OxMetrics) and Monte Carlo methods (using Excel)

## Masters Capstone

The Role of Theory-Motivated Fundamentals in Long-Horizon Exchange Rate Forecasting

Dr. Jaime Marquez

Examined the role of "fundamentals" (or theory) in long-term exchange rate forecasting, improving the accuracy of long-term exchange rate forecasts by incorporating structural components, such as the relative price ratio. Analysis conducted in EViews.

### Technical Skills

computing

Statistical R, EViews, Stata, Matlab

Data stores SQL(PostgreSQL), SAS, FAME

Programming Python, Linux (bash)

Markup LaTeX, Markdown

Version Git control

Office Excel, PowerPoint, Word

## Relevant Graduate/Post-Graduate Coursework

- Time-Series Econometrics
- Risk Analysis & Modeling
- Cross-Sectional Econometrics
- Global Macro Modeling

Corporate Finance

- Multinational Corporate Finance
- Foundations of Data Analytics and Data
  Software Engineering for Data Science

## Additional Coursework

- Machine Learning by Stanford University–Coursera
- o Applied Machine Learning in Python by University of Michigan-Coursera
- o Introduction to Computer Science and Programming Using Python by MIT-edX
- Introduction to Computational Thinking and Data Science by MIT-edX