

Erica M. Ryan

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EDUCATION

HARVARD EXTENSION SCHOOL, DISTANCE LEARNING

- Courses: Linear Algebra and Real Analysis 1 December 2019

INDIANA UNIVERSITY, DISTANCE LEARNING

- Courses: Intro to Mathematical Proof, Differential Equations August 2019

UNIVERSITY OF MARYLAND, COLLEGE PARK, MD

B.S. Economics, Magna Cum Laude; B.A. Studio Art, Magna Cum Laude, Honors

May 2018

- GPA 3.9
- Honors: DCC Honors College, Phi Beta Kappa
- Scholarships: Maryland Delegate Scholarship 17'-18', Creative and Performing Arts Scholarship 17'-18'
- Coursework: Econometrics (with time series), Game Theory, Behavioral Economics, Labor Theory, Theory of Economic Development, Probability and Statistics, Multivariable Calculus, Intermediate Micro/Macro
- Extracurricular Involvement: Director of Tutoring/Vice President of The Economics Association, Member of the Math Club, Member of the Promoting Achievement and Diversity in Economics Fellowship (PADE)

PROFESSIONAL EXPERIENCE

Fannie Mae, Washington, DC

Financial Engineer, Model Risk Management

June 2018-Present

- Researching the history of macroeconomic variables; performing a literature review; testing model versions with macroeconomic indicators included/excluded; and preparing a presentation on best practice guidelines.
- Reviewing econometric models on a team of up to five reviewers. Reviews included: evaluating component models, usages, methodology, assumptions, and limitations; validating code; and writing a final review memo.
- Applying machine learning to improve upon current models in a group project for a python reading group and in a company sponsored hackathon.

The Economics Department, College Park, MD

Research Assistant (Part time)

October 2016-October 2017

- Under Dr. Murrell: Researched and cleaned the data for over 150 judges for birth and death date information; Implemented imputation techniques for missing data in order to maintain the sample size
- Under Sai Luo, a graduate student at UMD: Collected data on the annual volume of SAT test-takers per state and scores sent; identified the ACT as additional data source; automated data collection/cleaning.

NASA Goddard, Greenbelt, MD

Intern in Safety and Mission Assurance Division, Supply Chain Management

June 2017-August 2017

- Compiled data on approximately 150 suppliers relevant to current NASA missions.
- Created data visualizations including network diagrams and geomaps of current supply chain relationships for two NASA missions, and presented a poster to over 2,500 staff at a Summer Intern Poster Session.

The FDIC, Washington, DC

Intern in Risk Management Supervision Division (RMS)

May 2016-August 2016

- Led a 3-person research group on Fintech including Roboadvisors, Neobanks, Big Data, and Cryptocurrency resulting in a briefing of the Director of RMS and other managers followed by a Q & A session.
- Contributed questions and answers relating to the creation of De Novo banks to the Briefing of the Chairman.
- Produced a matrix of violations by condensing approximately 80 Reports of Examination into one document.

SKILLS

- Proficient in: R, Python, Tableau, SAS, LaTeX, Excel, Adobe Creative Suite
- Basic Knowledge of: STATA, SQL, HTML, CSS, MATLAB, Machine Learning, Spanish