ALEXANDER BRUCE

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EDUCATION

Gannon University

B.S.B.A in Economics, Minor in Statistics *May 2025*

Summa Cum Laude, Award for Academic Excellence in Economics GPA: 3.97

Johns Hopkins University

Non-degree, Applied and Computational Mathematics *August 2025-Present*

Selected Courses: Advanced Statistical Modeling, Matrix Theory, Linear Algebra, Differential Equations, Probability and Statistics, Applied Econometrics, Mathematical Modeling, Financial Mathematics, Intro to C/C++, Game Theory, Financial Markets and Institutions, Intermediate Micro/Macroeconomics

RESEARCH

Estimating Securities-Based Loans Outstanding (joint with Simona Hannon, Federal Reserve Board)
FEDS Notes, 2024. Board of Governors of the Federal Reserve System

An Overview of Credit-Building Products (joint with Simona Hannon, Federal Reserve Board)
FEDS Notes, 2024. Board of Governors of the Federal Reserve System

A Note on the New Credit Union Estimates in the G.19 "Consumer Credit" Statistical Release (joint with Michael Chernousov Simona Hannon and Marc Scott, Federal Reserve Board)
FEDS Notes, 2025. Board of Governors of the Federal Reserve System

A Note on the Removal of the Nonfinancial Business Sector in the G.19 "Consumer Credit" Statistical Release (joint with Michael Chernousov, Simona Hannon and Marc Scott, Federal Reserve Board)
FEDS Notes, 2025. Board of Governors of the Federal Reserve System

The Payday Rule and Credit Supply (forthcoming, joint with Simona Hannon, Federal Reserve Board)

Public Response to Mass Shootings: A Data-Driven Approach Using Google Trends
(joint with Graham Rusco, Gannon University)

- ◇ 2nd place in the undergraduate paper contest at the Pennsylvania Economic Association Annual Conference
- ◇ 1st place in the undergraduate paper contest at the OAEPS Annual Meeting

Similarities in Thought Between Calvin Coolidge and Milton Friedman

- ◇ 1st Place in Undergraduate Paper Competition - Calvin Coolidge Presidential Foundation/Free to Choose Network

EMPLOYMENT

Federal Reserve Board

Research Assistant *June 2025 - present*

Division of Research and Statistics, Consumer Finance Section

• Conducted a comprehensive literature review on the dynamic and growing market of Buy-Now, Pay-Later. Created a bulletin listing relevant materials, and review table summarizing key findings in LaTeX.
• Developed a novel measure of quarterly household bankruptcies utilizing consumer credit panel data, designed to replace an existing production metric.
• Contributed to section inputs for the Tealbook, the primary internal material presented to committee members at the FOMC meeting. Responsible for updating a chartpack highlighting developments in the U.S. household and real estate finance markets.

Federal Reserve Board

Economics Intern for Dr. Simona Hannon *May 2023 - June 2025*

Division of Research and Statistics, Consumer Finance Section

• Created a novel data set of U.S. finance companies. Used R and STATA to web scrape, clean, prepare,

and visually inspect data to offer insights into a major component of the growing, yet understudied, non-bank sector in the U.S.

• Co-authored five FEDS Notes on securities-based lending, the Payday rule, credit-building products, and new credit union estimates along with the removal of the nonfinancial business sector in the G.19 statistical release. Used ggplot and policyPlot to create charts, prepared data, and proofread the manuscripts.

Department of Economics - Gannon University *January - December 2023; June - October 2024*
Voluntary Research Assistant for Dr. David Yang

• Reviewed Python code retrieving macroeconomic data via FRED API and crypto price data via Tiingo.
• Assisted in the creation of a Jupyter Notebook teaching fundamentals of financial analysis in Python.
• Attended private lectures covering econometrics and machine learning methods (with sk-learn).

TECHNICAL SKILLS

R | STATA | Python | SQL | HTML | CSS | LaTeX| JS | Google Professional Data Analytics Certification