WESLEY JANSON

(218) 639-7809 ◇ wr.janson@gmail.com ◇ LinkedIn ◇ Personal Website

EDUCATION

University of Chicago-Harris School of Public Policy June 2023
M.S., Computational Analysis and Public Policy

University of Minnesota-Twin Cities May 2018
B.A., Economics

TECHNICAL SKILLS

Computer Languages `R` (*rshiny, tidyverse, nnet*), `Python` (*numpy, pandas, sklearn*), `Stata`, `SQL`
Software & Tools LaTeX, `Git/Github`, `Microsoft Office Applications`, AWS

PROFESSIONAL EXPERIENCE

Internal Revenue Service July 2023 - Present
Data Scientist

- Collaborate with various IRS divisions to identify and resolve ongoing data issues and initiatives, employing effective statistical data modeling and engineering techniques to achieve solutions for customers
- As a member of the Automated Analytics Lab in the office of Research, Applied Analytics, and Statistics, develop and maintain the Enterprise Planning Scenario Tools, a suite of RShiny dashboards used by internal stakeholders in planning of resource allocation for the fiscal year
- In response to a GAO audit on IRS' Private Debt Collection program, co-lead the development of an equity framework and evaluation methods by organizing meetings with stakeholder leadership, defining equity goals, developing bias methodology and piloting analyses, evaluating demographic impacts using advanced statistical methodologies with R and Python, and recommending strategies to mitigate bias
- Team up with qualified researchers in the Joint Statistical Research Program (JSRP) to incorporate tax micro-data into academic research providing new insights and advancing the understanding of the ways that existing tax policies affect individuals, businesses, and the economy

Securities Quote Xchange (SQX) May 2022 - July 2023
Data Science Consultant

- Provide research support for SQX – a financial services firm specializing in alternative trading systems for fixed income securities – deploying data mining project management to use econometric and machine learning modeling using `R`, `Python`, and `SQL` to enhance products for clients
- Develop a data-driven approach to grouping peer bonds in SQX's municipal bond pricing model – used by traders, analysts, and regulators – creating time-consistent groupings, and shortening run-time by 90%
- Implement an internal credit ratings system using a gradient-boosted tree machine learning algorithm, which assigns ratings to approximately 500,000 municipal bonds otherwise unrated by S&P/Moody's

University of Chicago, Harris School of Public Policy May 2022 - July 2023
Technical Assistant, Professor Justin Marlowe

- Overhaul the Harris School's Center for Municipal Finance website, populating it with information on events, media coverage, relevant research and data
- Install a brand-new "CMF Data Dashboard" which provides users with a range of data visualizations concerning municipal bond trading, pricing, and liquidity measures
- Using a repeat-sales methodology, create a municipal bond index gauging individual city/county/school district financial health and market sentiment, featured in Bloomberg News and Crain's Chicago Business

Federal Reserve Bank of Cleveland September 2018 - August 2021
Research Analyst

- Advanced the research projects of bank economists' for public viewing and submission to academic journals by gathering relevant data querying various open-source databases, preparing the data for analysis, performing econometric analysis using `R` and `Stata`, and writing up findings
- Enhanced preparation to the monetary policy-making process by supporting bank economists with briefings regarding monetary policy and the bi-quarterly Federal Open Market Committee meetings by creating data visualizations
- Automated the *Simple Monetary Policy Rules* bank product using `Matlab`, eliminating manual data entry and potential user error, ensuring the quarterly updates to the underlying information provided to the public is accurate
- Coauthored 3 short, policy-relevant articles aimed for public viewing, and 2 academic working papers, one currently under review at an academic journal, one featured in the *Journal of Money, Credit and Banking*

Federal Reserve Bank of Philadelphia June 2018 - August 2018
Model Development Intern, Risk Analytics & Surveillance

- Developed a new forecasting model for use by FRBP officials on cash deposits and orders from third district member banks by utilizing time series econometric techniques in the `SAS` programming language

University of Minnesota, Heller-Hurwicz Economics Institute December 2017 - May 2018
Undergraduate Research Assistant, Senior Fellow Kurt Winkelmann

- Provided research assistant support on project using economic theory, econometrics, and data to inform upon the construction of optimal pension plans with a specific focus on public plans
- Orchestrated the constructing and testing of economic and financial models used to inform upon optimal public pension policy and employee savings decisions
- Coauthored "Risk-taking by Public Pension Funds", a policy brief appearing on the HHEI website

SELECTED PUBLICATIONS

"Diversification and Stability in Illinois Local Government Revenues" (2023, with Justin Marlowe) *Illinois Municipal Policy Journal*, 8(1), 61-80.

"Out of Bounds: Do SPF Respondents Have Anchored Inflation Expectations?" (2023, with Carola Conces Binder and Randal J. Verbrugge) *Journal of Money, Credit and Banking*, 55(2-3), 559-576.

Forward Guidance during the Pandemic: Has It Changed the Public's Expectations? With Chengcheng Jia. *Federal Reserve Bank of Cleveland Economic Commentary*, Number 2020-27. December 2020.

The Information Effect of Monetary Policy: Self-Defeating or Optimal? With Chengcheng Jia. *Federal Reserve Bank of Cleveland Economic Commentary*, Number 2020-15. July 2020.

The CPI-PCEPI Inflation Differential: Causes and Prospects. With Carola Conces Binder and Randal J. Verbrugge. *Federal Reserve Bank of Cleveland Economic Commentary*, Number 2020-06. March 2020.

Risk-taking by Public Pension Funds. With Kurt Winkelmann, Jordan Pandolfo, and Matthew Murphy. *Heller-Hurwicz Economics Institute Policy Brief*, December 2018.