WESLEY JANSON

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

EDUCATION

University of Chicago 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 (*pandas, sklearn, PySpark*), SQL, Stata
Software & Tools	LaTeX, Git/Github, Microsoft Office Suite, Bloomberg, Amazon Web Services

PROFESSIONAL EXPERIENCE

Internal Revenue Service, U.S. Department of the Treasury July 2023 – Present
Data Scientist

- Collaborate cross-functionally with IRS divisions to identify and resolve data challenges, leveraging statistical modeling and engineering techniques to develop solutions supporting tax policy and operational decision-making
- Develop and maintain the Enterprise Planning Scenario Tools, a suite of RShiny dashboards within the Automated Analytics Lab of the Office of Research, Applied Analytics, and Statistics, enabling internal stakeholders to optimize workforce allocation for approximately 8,000 employees, representing a budget of around $400 million

University of Chicago, Harris School of Public Policy
Affiliated Researcher July 2023 – Present

- Conduct original research in municipal finance applying modern portfolio theory to explore risk asymmetry and service-driven revenue structures, developing a corresponding R package that optimizes portfolios and generates efficient frontiers

Technical Assistant, Professor Justin Marlowe May 2022 – July 2023

- Overhauled the Harris School's Center for Municipal Finance website, integrating event updates, media coverage, research, and data, including launching the "CMF Data Dashboard" to provide interactive visualizations on municipal bond trading, pricing, and liquidity
- Using a repeat-sales regression methodology, created a municipal bond index gauging 50 individual city/county/school district financial health and market sentiment, featured in Bloomberg News and Crain's Chicago Business, and found on the CMF Data Dashboard

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

- Provided research support for SQX – a financial services firm specializing in alternative trading systems for fixed income securities – deploying data management practices, econometric and and machine learning modeling using R, Python, and SQL to enhance products for clients
- Developed, trained, and iterated 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 reducing run-time by 90%
- Implemented an internal credit ratings system using a gradient-boosted tree machine learning algorithm, assigning ratings to approximately 500,000 otherwise unrated municipal bonds, further strengthening SQX's analytical capabilities in fixed-income markets

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

- Advanced six research projects aimed for public release and academic journal submission by gathering and preprocessing relevant data, performing econometric analysis in R and Stata, and writing up findings
- Enhanced preparation to the monetary policy-making process by supporting bank economists with briefings on financial and macroeconomic conditions ahead of the bi-quarterly Federal Open Market Committee meetings by automating data collection, creating data visualizations and other research material