FRUZSINA MAYER

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PROFILE: Economics PhD graduate with expertise in Applied Microeconometrics. Mastered the [Social Policy Simulation Database and Model (SPSD/M)](#), a microsimulation model of the Canadian tax and transfer system published by Statistics Canada. Developed deep knowledge of provincial and federal fiscal policy in Canada through developing the SPSD/M. Skilled in statistical software and adept at acquiring new analytical techniques to expand expertise. Experienced in conducting independent empirical research using confidential data, modern econometric methods, and theoretical modelling. Methodical and detail-oriented, with strong presentation skills developed through presenting original research and teaching undergraduate Econometrics and SPSD/M courses.

PROGRAMMING SKILLS: R (advanced), Stata (advanced), SAS (advanced), LaTeX (advanced), MATLAB (intermediate), MS Excel (intermediate), C++ (beginner), Git (beginner), Python (beginner), SPSS (beginner)

LANGUAGE SKILLS: English (fluent), French (intermediate), German (fluent), Hungarian (native), Spanish (beginner)

WORK EXPERIENCE

Research Analyst (EC-05)   May 2024 – Present

Economic and Social Analysis and Modelling Division, Statistics Canada, Remote

- Worked with external clients on implementing their tax policies in the SPSD/M: discussed the viability of planned changes, evaluated possible effects on outcomes, created simulations, and presented and explained results.
- Developed new materials for the SPSD/M course schedule through collaboration, increasing the quality and relevance of training for users.
- Taught modules of the SPSD/M course for advanced users targeting policy analysts.
- Coordinated the tax and transfer policy implementation tasks for recent SPSD/M releases.
- Presented research to management supporting investment proposals and SPSD/M's future development.

Economist (EC-04)   July 2021 – April 2024

Economic and Social Analysis and Modelling Division, Statistics Canada, Remote

- Streamlined and accelerated nowcasting of monthly employment status in the SPSD/M from Labour Force Survey data in SAS and expedited result validation through data visualization.
- Maintained the labour force adjustment module of SPSD/M that allows modelling transfers related to the COVID-19 pandemic. Extended this module beyond the pandemic years to generate data for the quarterly [Distribution of Household Expenditure Accounts](#) releases.
- Investigated new tax and transfer policies and changes to Canadian legislation.
- Programmed SPSD/M model code in C++ to incorporate selected tax and transfer policies.
- Taught the introductory course on SPSD/M use for external audiences.
- Advised clients on using various SPSD/M facilities and designing their custom policy designs within the program.

Research Assistant to Professor [M. Scott Taylor](#)   Jan 2016 – Aug 2021

University of Calgary, Calgary, AB

- Created cleanly labelled data visualizations in R, Stata, and LaTeX for presentations and publications
- Replicated economic simulations in R to help model formation

- Collected and analyzed data on a wide range of topics, such as the evolution of city sizes across the world, marine traffic and port locations in the Pacific Northwest, and historic fuel prices in England
- Prepared literature review to support projects in international trade and natural resource economics

Sessional Instructor   May 2019 – June 2019

University of Calgary, Calgary, AB

- Taught "Use of Statistics in Economics" course for a class of 15 undergraduate students

Research Assistant to Professor Pamela Campa   July 2015 – Aug 2015

University of Calgary, Calgary, AB

- Collected historical census data for European countries with particular focus on Germany

Teaching Assistant   Sept 2014 – May 2019

University of Calgary, Calgary, AB

- Instructed 45 undergraduate students on applying Stata in lab sessions for the "Use of Statistics in Economics" course and received the PhD Teaching Assistant Excellence Prize for this work in 2019
- Other undergraduate courses: "Use of Statistics in Economics", Winter 2019; "Principles of Macroeconomics", Fall 2015; "Canadian Public Finance", Spring 2015; "Environmental Economics", Winter 2015; "The Global Trading System", Winter 2015; "Industrial Organization", Fall 2014

EDUCATION

Ph.D. in Economics, University of Calgary, Calgary, AB   2014 – Oct 2021

- Dissertation: "Resource allocation and preference differences between genders"
- University of Calgary Graduate Studies Scholarship in 2021, University of Calgary
- Eyes High International Doctoral Scholarship in 2015, 2016, 2017, 2019, University of Calgary

M.Sc. in Economics, Institute for Advanced Studies and Vienna University of Technology, Vienna, Austria 2014

B.A. in Applied Economics, Eötvös Loránd University, Budapest, Hungary   2012

PUBLICATIONS AND WORK IN PROGRESS

- "International Trade, Noise Pollution, and Killer Whales" with M. Scott Taylor, NBER Working Paper (2023)
- "Modeling Tax and Transfer Policies during a Pandemic Shock - Review of SPSD/M Performance during COVID" with Jaclyn Layton, Henrietta Asiamah, Jackson Chung, and Chantal Hicks (2023)

PROFESSIONAL DEVELOPMENT

57th Annual Conference of the Canadian Economic Association   June 2023

CPEG & OSN Session: Broader Impacts of COVID-19 on the Economy and Society

- Presented "Modeling Tax and Transfer Policies during a Pandemic Shock - Review of SPSD/M Performance during COVID"

Prague Workshop on Gender and Family in the Labor Market   May 2019

Virtual Research Collaboration on Gender and Family in the Labor Market, Charles University, Czech Republic

- Presented thesis chapter ("Competition, selection on gender, and university entry") in field conference

References available upon request.   Last updated: January 2026

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