

PROFESSIONAL SUMMARY

Policy & Computational Social Science Researcher with strong expertise in causal inference, econometrics, and applied machine learning. Experienced in designing and executing quasi-experimental analyses using large-scale administrative and survey data to evaluate social and labour market policies. Skilled in building statistical models, conducting program and policy evaluations, and applying time series, machine learning, and panel data methods. Demonstrated ability to translate complex quantitative findings into clear, actionable insights for policymakers and business leaders.

EDUCATION

COLUMBIA UNIVERSITY, School of International and Public Affairs (SIPA)

New York, USA

Master of Public Policy & Administration, Data Science for Policy (*Program Evaluation & Social Policy Minors*)

May 2026

Relevant Coursework: Causal Inference, Applied Econometrics, Quantitative Methods for Program Evaluation and Policy Research, Time Series Analysis, Applying Machine Learning for Policy Research, Social Welfare Policy Analysis, Micro/Macro -economics, Urban Economics

Relevant Research:

- **Housing Affordability and Homelessness in New York City:**
Applied multivariate time-series methods (Vector Autoregression) to examine the dynamic relationship between median asking rents and homeless shelter population levels in New York City using monthly administrative and housing market data. Analyzed & quantified the impulse responses and temporal interactions to assess how housing cost shocks are associated with changes in shelter population over time.
- **Refugee Inflows and Housing Prices in the EU:**
Applied staggered difference-in-differences models to panel data combining UNHCR refugee flows, housing prices, and macroeconomic controls across EU countries. Estimated heterogeneous effects by refugee intensity and housing market conditions, producing policy-relevant insights on local housing pressures.
- **Fertility Rate Predictive Modeling:**
Developed an ARIMA model to forecast future fertility rates, ensuring model stationarity and optimal lag selection. Evaluated model performance using AICc, residual diagnostics, and the Box–Ljung test to validate autocorrelation and enhance forecasting accuracy and reliability.

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS, Engineering College

Dhahran, Saudi Arabia

Bachelor of Science, Electrical Engineering (*Signal Processing & Artificial Intelligence Minors*)

September 2021

PROFESSIONAL EXPERIENCE

INTERNATIONAL LABOUR ORGANIZATION (ILO)

New York, USA

Graduate Researcher

November 2025 - Present

- Familiarizing with ILO legal, statistical, and measurement frameworks related to forced labour to ensure alignment with institutional guidelines.
- Conducting a structured review of academic and policy literature on the determinants of forced labour, with a focus on economic, social, and crisis-related risk factors.
- Synthesizing theoretical and empirical evidence to support the development of research questions and an econometric analysis plan.
- Supporting early-stage project scoping through background research and documentation in collaboration with ILO researchers and SIPA faculty advisors.

COMMUNICATION, SPACE & TECHNOLOGY COMMISSION (CST)

Riyadh, Saudi Arabia

Cloud Computing Development Specialist “Market Research”

April 2023 - August 2024

- Designed and implemented a comprehensive quantitative assessment framework for 32 cloud service providers, and developed a performance index that informed \$30M in national investment policies, enhanced market transparency, and fostered competition by incentivizing providers to improve quality and efficiency.
- Built interactive dashboards for senior leadership to track cloud provider performance in real time, enabling faster, data-driven strategic decisions and reducing average decision-making time by 60%.
- Produced analytical reports analyzing 1,200 organizations across 9 industries, identifying performance gaps and market demand trends to guide strategic growth and optimize investment decisions.

- Collaborated with policy, engineering, and investment teams to translate complex analyses into actionable strategies, driving 5 regulatory reforms.

DELOITTE

Business Analyst (Public Sector Program Analysis)

Riyadh, Saudi Arabia

April 2022 - April 2023

- Conducted quantitative and qualitative assessments of 10+ government and financial-sector digital programs, identifying implementation gaps and regulatory risks that contributed to program reforms and compliance improvements.
- Developed predictive workload and resource-demand models supporting capacity planning for 200+ systems, contributing to more efficient infrastructure planning and reduced risk of service outages.
- Supported public-sector clients in designing regulatory-compliant, data-driven operating models, informing digital investment and modernization decisions.
- Presented evidence-based analyses and risk evaluations to senior leadership stakeholders, influencing capital allocation decisions across multiple agencies.

SAUDI TELECOM COMPANY (STC)

Access & Transport Strategy Developer

Riyadh, Saudi Arabia

December 2021 - April 2022

- Applied predictive and geospatial analysis to inform infrastructure investment decisions aligned with national connectivity and inclusion goals.
- Assessed regional disparities in service access to support equitable expansion planning.
- Developed data-driven insights report to support strategic planning and align infrastructure decisions with national objectives.

LEADERSHIP & ACTIVITIES

Program Assistant – Data Science For Policy Concentration at SIPA

Sep 2025 - Present

- Coordinate academic programming, workshops, and events bridging data science and public policy.
- Collaborate with faculty, administrators, and students to improve program operations and enhance student engagement.
- Support curriculum development and resources to strengthen applied data science training for policy students.
- Led hands-on workshops mentoring students in Python and R programming, data manipulation, and applied analytics.

SKILLS

- Python
- R & R Markdown
- Stata
- SQL
- Tableau
- Figma
- Microsoft Office Suite (Excel, PowerPoint, Word)
- Arabic (Native), English (Fluent)