Shiyao Wang

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EDUCATION

Georgetown University Washington, D.C.

Master of Public Policy Focusing on Data Analysis (GPA 3.8/4.0) May 2018

Coursework: Statistics in Policy Analysis, Business, Accounting, and Finance, Spatial Data Modeling

Wuhan University Wuhan, China

Bachelor of Business Administration Management (GPA 3.9/4.0) Jun 2016
Bachelor of Arts English Language and Literature (GPA 3.9/4.0) Jun 2016

Coursework: Financial Management, Strategic Management, Project Management, Translation Skills

SKILLS AND CERTIFICATES

CFA Level III

Software

Microsoft Excel, Tableau, Power BI, Matlab, PowerPoint, Figma
Programming

Python, R, Stata, VBA, SQL, HTML, JavaScript, CSS

WORKING EXPERIENCE

International Monetary Fund

Washington, D.C.

Research Analyst | Strategy, Policy, and Review Department

July 2019 – Present

- Modeled the External Balance Assessment-Lite 3.0 CA and IREER in **Stata**, which are forecast models using IV- and BMA methods; analyzed credit and exchange rate risk on macro level.
- Used UN Comtrade API and Python scripts to download and process bulk trade data.
- Built **Excel**-based interface to analyze the cross-version consistency with dynamic chart dashboards.
- Analyzed the Orbis Historical Firm Ownership data with **SQL** and **Stata**, designed algorithms to automate the generation process of summary tables and reports; initiated a draft of the working paper.
- Used **Haver**, **SWIFT** and **Bloomberg** tools to update the Disorderly Market Condition report on a weekly basis, which involved variables like trading volume, bid-ask spread, etc.
- Wrote an ado program in which automates the internal data requesting process.
- Participated in the Trade Nowcast Project, which used spatial clustering and random forecast classification to predict the multilateral trade trends using daily AIS ship data with **Python**, **C++**, and **Stata** programs.

World Bank Group Washington, D.C.

Consultant | Poverty Global Practice, East Asia and Pacific Region

Aug 2018 – May 2019

- Harmonized Thailand Labor Force Survey datasets over the years 1985 to 2017, processed the micro-level survey modules using **Stata** programs.
- Used Photoshop to prepare figures for a published department report; used Word to format and cross-referenced the report.
- Assisted the operations team with feedbacks and charts support in excel.
- Created **Tableau** stories and dashboards, identified breaks and trends with bar charts, line charts, and maps, published in internal **SharePoint** page and maintained it on a quarterly basis.

Johns Hopkins University

Washington, D.C.

Teaching Assistant | Carey Business School, Power and Politics

Aug 2018 - May 2019

• Assisted in grading MBA student's homework on a weekly basis; provided comments on the papers according to students' usage of course concepts and the depth of analysis.

Teaching Assistant | McCourt School of Public Policy, Economics

Sep 2017 - May 2018

- Held office hours to answer questions in economics, nominated for the 2018 Georgetown Annual Best Teaching Assistant Award.
- Graded problem sets and analyzed grading results in Excel, recorded videos for students on difficult concepts.

WEBSITES/APPLICATION

Galaxy Visualization

(click to visit)

An opensource data visualization template website contains more than 100 charts made from multiple software including Excel, Stata, Tableau, RStudio, Python and PowerBI. Designed all the pages with **Photoshop** and **Figma**. The database is built in **SQL**, the back end is built using **Python**. The front end is built with **TypeScript** under **React**.

Scorelib (click to visit)

The back end for a WeChat app which enable users to customize an exam experience on a portable device. The database is built in **SQL** while the server structure is written in python. The WeChat app's front end is built with **VUE** framework using **JavaScript** and **CSS**.

Bilibili Channel (click to visit)

Uploaded more than one hundred data training videos and have more than 60,000 views.

PUBLICATIONS AND REPORTS

OpenIntro Statistics Chapter 1 and 2, Chinese translation, August 2022, https://www.openintro.org/book/os/

External Sector Developments and Assessments for the Wider Membership: Multiple Shocks and Mounting Vulnerabilities, Internal Special Reports to Management, June 22, 2022

World Seaborne Trade in Real Time: A Proof of Concept for Building AIS-based Nowcasts from Scratch, Working Paper No. 2020/057, May 14, 2020

Longer delivery times reflect supply chain disruptions, IMF Blog, October 25, 2021

World Bank East Asia and Pacific Economic Update, April 2019: Managing Headwinds, Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/31500 License: CC BY 3.0 IGO http://hdl.handle.net/10986/31500

Thailand Economic Monitor, Inequality, Opportunity, and Human Capital, Jan 2019, World Bank Document, December 26, 2018.

https://documents1.worldbank.org/curated/en/154541547736805518/pdf/Thailand-Economic-Monitor-Inequality-Opportunity-and-Human-Capital.pdf