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 Passed Jun 2019

**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.

## Georgetown University Washington, D.C.

*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)](http://www.galaviz.cn)

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)](https://www.scorelib.fun/home)

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)](https://space.bilibili.com/700471320)

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>