JERIN VARGHESE

📞 410-967-5744   @ jerinv93@gmail.com   📍 Ellicott City, MD

EXPERIENCE

Economist (Data Scientist)
U.S. Bureau of Labor Statistics

📅 10/2016 - Ongoing   📍 Washington, D.C.

- Received the DOL Secretary's Honor Award for developing a Python-based ETL system to produce the nation's official state-level labor productivity and cost statistics
- Reduced the time to estimate and produce industry-level employment and hours data from 2 months to 2 weeks by converting a manual Excel-based process to an automated Python system
- Created an interactive web dashboard application using Python that automated weeks of analysis to quickly answer questions and extract important highlights and trends from new or revised data
- Provided technical support to senior economists to implement statistical techniques such as cross-validation, small area estimation and iterative proportional fitting on large survey datasets
- Led a cross-divisional team tasked with creating an improved SQL Server database in order to centralize all data produced by the office and to facilitate production and reporting tasks
- Compiled and presented data analysis and visualizations on trends and revisions in newly processed data to Supervisory Economists and the Office Associate Commissioner
- Spearheaded the use of Python and Git in the agency by hosting numerous informative presentations and creating a series of tutorials and exercises

Research Associate
Econometrica, Inc.

📅 08/2015 - 10/2016   📍 Bethesda, MD

- Coded SAS programs for data extraction and statistical analysis on foreign and federal datasets
- Prepared an economic analysis report of increased safety benefits and reduced violation case settlement costs for a petition to amend Pipeline and Hazardous Materials Safety Administration rules regarding cargo tank test pressures
- Created a VBA based data scraper to calculate distances between two ports for thousands of routes using the Google Maps Distance Matrix API
- Wrote up analysis on wages of airline, airport, and security workers for dozens of countries in Africa, Asia, Europe, and the Middle East

Quality Control Assistant
American Institutes for Research

📅 06/2015 - 08/2015   📍 Washington, D.C.

- Tested for and reported technical usage consistencies on multiple state online assessment reporting systems
- Specialized in creating system mock-ups through HTML and image editing to initiate testing process

Research Assistant
University of Maryland, College Park

📅 03/2015 - 06/2015   📍 College Park, MD

- Prepared reports containing statistical analysis and data visualizations of career plans and salary distributions of the graduating class
- Contributed to data cleaning and analysis of survey data using Microsoft Excel

EDUCATION

M.S. in Applied Economics
Johns Hopkins University

📅 05/2016 - 12/2019

- Coursework includes: Macroeconomic Forecasting, Microeconometrics (Cross-Section and Panel Analysis), Machine Learning in Statistics, and more

GPA

4.0 / 4.0

B.A. in Economics and Mathematics
University of Maryland, College Park

📅 09/2011 - 05/2015

TECHNICAL SKILLS

Python   SAS   SQL

Microsoft Excel   Git   Tableau

EViews   HTML

PUBLICATIONS

Intrasectoral transactions: the most important productivity statistic you've never heard of
Monthly Labor Review, U.S. Bureau of Labor Statistics

Thomas Kovarik and Jerin Varghese

📅 09/2019   🔗 https://doi.org/10.21916/mlr.2019.20

CERTIFICATES

Machine Learning Fundamentals with Python
DataCamp, October 2021

Time-Series Analysis and Forecasting
The National Association for Business Economics, December 2018

Data Analyst with Python
DataCamp, March 2018