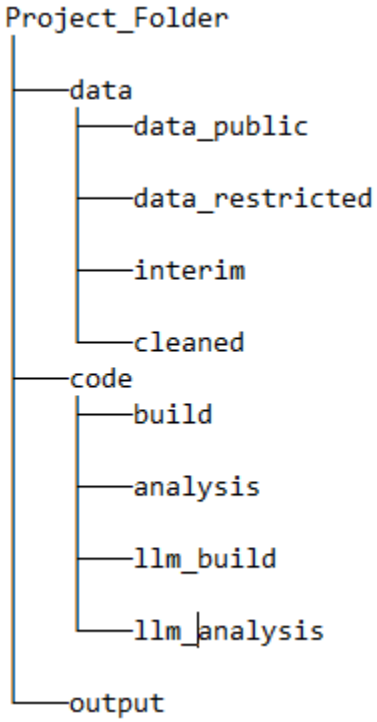
README file for reproducing "Computerization of Office Jobs"

by Marcus Dillender and Eliza Forsythe

This document describes how to replicate the Burning Glass results of "Computerization of Office Jobs." The basic directory structure for the project is as follows:



Publicly available data sources can be found in the data_public directory. To replicate the analysis, users will need to obtain the Burning Glass data, which are not publicly available, from Burning Glass Technologies and put the data in the data_restricted directory. Since we obtained the data for this project, Burning Glass Technologies has merged with Lightcast. Data can be purchased by contacting Lightcast (https://lightcast.io/contact-us).

There are two master scripts (master_bg.do and master_llm.do) that run all of the analysis. The script master_bg.do runs all the code using the Burning Glass data from start to finish. In addition, the code creates the measure of technological adoption used in the ACS analysis. This master_bg do file is located in the code directory and can be run after the root directory in master_bg.do is changed to where the project directory is stored locally.

To run the ACS/local labor market analysis, run master_llm.do, after setting your project directory to your machine.

All of the analysis was performed with Stata. For the Bartik instrument robustness checks in the online appendix, it is necessary to download the following github package: https://github.com/paulgp/bartik-weight, from Goldsmith-Pinkham, Sorkin, and Swift 2020.

Public Data sources

The public data sources are available as follows:

Retrieved from IPUMS https://usa.ipums.org/usa/	acs_bgyears.dta acs_industry_by_occupation.dta acs_oas_graphs_data.dta census_1970_2000.dta
Retrieved from David Dorn https://www.ddorn.net/data.htm	cw_cty_czone.csv, cw_puma1990_czone.csv, cw_ctygrp_1970_czone_corr.csv, cw_ctygrp_1980_czone_corr.csv
Retrieved from https://mcdc.missouri.edu/applications/geocorr.html	geocorr14.csv geocorr14_2010.csv
Retrieved from BLS (OEWS) https://www.bls.gov/oes/tables.htm	national_M2016_dl.xlsx
Retrieved from BLS (CPI) https://www.bls.gov/cpi/data.htm	SeriesReport- 20250820071921_7f658a.xlsx
Retreived from BLS (Crosswalk from 2010 Census occupation codes to 2010 SOC codes) https://www.bls.gov/cps/cenocc2010.xlsx	cenocc2010.xlsx soc_to_census2010.dta

References

David Autor and David Dorn. "The Growth of Low Skill Service Jobs and the Polarization of the U.S. Labor Market." *American Economic Review*, 103(5), 1553-1597, 2013.

Goldsmith-Pinkham, Paul, Isaac Sorkin, and Henry Swift. "Bartik instruments: What, when, why, and how." *American Economic Review* 110.8 (2020): 2586-2624

Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Grace Cooper, Julia A. Rivera Drew, Stephanie Richards, Renae Rodgers, Jonathan Schroeder, and Kari C.W. Williams. IPUMS USA: Version 16.0 [dataset]. Minneapolis, MN: IPUMS, 2025. https://doi.org/10.18128/D010.V16.0