

# SHELBY L LEVEL

**Status:** Research Analyst

**Field:** Public Health, Data Analytics, Data Visualization

**Techs:** R, Git, Shiny, Quarto, RMarkdown, GitHub, GitLab, Docker

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**Website:** <https://www.shelbylevel.org>

**GitHub:** <https://www.github.com/shelbylevel>

## Summary

Health data analytics, visualization, and dashboard enthusiast looking for an opportunity to continue my learning journey and expand my technical skill set with R.

## Skills

### Technical

- \* R Shiny Dashboard Development and Maintenance: Experience building and maintaining multi-tab modular dashboards
- \* Data visualization: Skilled at creating and improving static and interactive data visualizations and maps using a variety of R packages (ggplot2, plotly, highcharter, leaflet, sf)
- \* Sharing Data: Experience with literate computing and creating HTML documents, PDFs, Word documents, websites, and presentations using R Markdown and Quarto (revealjs, beamer, Bootswatch, bookdown)
- \* Experience with creating a Quarto website and hosting via Netlify as well as through github pages (GH-pages)
- \* Functional HTML, CSS, and LaTeX coding experience
- \* Expertise in securing, cleaning, and preparing data for analysis, storage, or presentation in R (tidyr, dplyr)

### Communication & Leadership

- \* Experience assisting with the onboarding of new dashboard staff across projects
- \* Experience working in a collaborative development environment using version control (Git, GitHub, GitLab, GitKraken)
- \* Excellent oral and written communication skills
- \* Project management experience including client and stakeholder relationship building, maintenance, and deliverables

## Education

**Biostatistics Graduate Certificate** - The Ohio State University

Jan. 2025 - Current

- \* Ongoing coursework

**Master of Public Administration** - Ohio University

Jul. 2023 - May 2024

- \* Graduate Research Assistant

**Bachelor of Science in Public Health** - University of Toledo

Aug. 2020 - May 2023

- \* Magna cum laude

## Work Experience

**Research Analyst (S2)** - Ohio Colleges of Medicine Government Resource Center

Jun. 2024 - Present

- \* Developing, maintaining, and improving interactive dashboards using R Shiny
- \* Working to improve the digital accessibility of public-facing, internal, and client-facing project dashboards to comply with WCAG guidelines
- \* Assisting with onboarding new staff across dashboard teams
- \* Improving documentation usability and navigation with dynamic and interactive options such as Quarto, Revealjs, Mark-down, and other HTML formats
- \* Expanding brand identity using cohesive styling and formatting across project deliverables and documents
- \* Learning new statistical methodologies by assisting with autocorrelation testing, measure construction, survey weighting, etc.

- \* Assisted with gathering 2012-2021 Ohio Medicaid Assessment Survey (OMAS) data for the Appalachian addendum and the Disability addendum of the 2023-2025 State Health Assessment (SHA)
- \* Created a brief report for the Regional QI Hub Quality Improvement Project (QIP) - Diabetes Institute, Ohio University on the connections between social determinants of health and chronic health outcomes and behaviors at the county and census tract levels in Ohio
- \* Analyzing survey data, social vulnerability indices, other Census Bureau data, and mapped transportation options and ADA compliant resources in Athens county for the Creating Healthy Communities Ohio Hub (Athens City County Health Department)
- \* Building interactive dashboards and applications with Shiny

**Research Staff** - Ohio University, Ohio Alliance for Population Health (OAPH)

Jul. 2023 - May 2024

- \* Analyzing CDC WONDER mortality data to identify health disparities in Ohio across geographic regions, time, and demographics
- \* Authoring several reports (diabetes, firearm mortality, disease mortality, etc.) focused on Ohio most generally and Appalachian Ohio in particular
- \* Providing ad hoc analytics and visualization support for OAPH members and clients

**Health Policy Intern** - Health Policy Institute of Ohio (HPIO)

Jan. 2023 - Jun. 2023

- \* Used secondary data to create data visualizations by Ohio's counties, zip codes, and census tract levels
- \* Provided ad hoc analytics and visualization support for HPIO members and clients
- \* Reviewed data entry, statistical calculations, and proper citation formatting for reports and other materials as part of quality control measures

**Data Analytics Intern** - Ohio University, Ohio Alliance for Population Health (OAPH)

Aug. 2022 - Dec. 2022

- \* Used R to gather and clean Census Bureau data, National Survey on Drug Use and Health (NSDUH) data, Ohio Department of Health (ODH) data (various), and CDC WONDER mortality data
- \* Profiled drug overdoses at the national, state, and county levels (Lucas County, Ohio in particular) with series of illustrations including tables, charts, maps

**Student Research Assistant** - University of Toledo, Department of Medicine

May 2022 - Aug. 2022

- \* Replicated HIV-1 Protease molecular dynamics simulations in vitro
- \* Induced mutations in the HIV-1 Protease, purified each mutated protease including four mutations and one wild type, and ran small angle x-ray scattering (BioSAXS) to confirm protein confirmation in simulated data
- \* Learned wet lab techniques in recombinant DNA transformation and protein purification
- \* Presented project updates to primary investigator and research team through weekly team meetings

## Data Projects

**Social Determinants of Health in Ohio's Counties and Census Tracts** - Ohio University

Dec. 2023 - Apr. 2024

- \* This project involved comparing and exploring commonly used Social Determinants of Health (SDOH) indices and their association with health outcomes in Ohio's counties and census tracts

**Case for State-Supported Public Osteopathic Medical School** - Morgan State University

Jun. 2023 - Jul. 2023

- \* Assisted with gathering demographic, Health Professional Shortage Areas (HPSAs), Medically Underserved Areas (MUAs), physician workforce, health status, and health outcomes data for Maryland and the Baltimore City and County metro area

**Vaccination Rates, COVID-19 Case Rates, and Excess Mortality** - University of Toledo

May 2022

- \* Used SAS to clean and analyze data from Our World in Data and the Worldbank International Database
- \* Performed regression analyses to determine if COVID-19 vaccination rates significantly reduced new COVID-19 cases or excess mortality in approximately 185 nations during Fall of 2021

## Certifications

\* National Commission for Health Education Credentialing Credential ID: 38648

## Leadership & Community Engagement

**KLAR Leadership Academy** - University of Toledo, Neff College of Business & Innovation

May. 2022 - Mar. 2023

\* Nominated to become a member of the 2022-2023 KLAR Leadership Academy through the University of Toledo Neff College of Business and Innovation

\* Strengthened leadership, teamwork, communication, and critical thinking skills by participating in learning and service events on campus and within the local community