# Kathryn Link-Oberstar

Chicago, IL | klinkoberstar@gmail.com | github.com/klinkoberstar

## Education

**Harris School of Public Policy, University of Chicago** — Chicago, IL
*M.S. Computational Analytics and Public Policy* — *June 2024*
- Coursework: Machine Learning, Statistics, Time Series Forecasting, Large Scale Computing, Software Engineering, Databases.
- Teaching Assistant: Machine Learning for Public Policy (Winter 2024 & Spring 2024).

**University of California, San Diego** — San Diego, CA
*B.A. Political Science/Public Policy* — *March 2019*
- Summa Cum Laude; Caledonian Honors Society.

## Experience

**U.S. Digital Corps (Assigned to the Administration for Children and Families)** — Remote, USA
*Data Scientist* — *August 2024 – Present*
- Assigned to the TANF Data Team, supporting data collection & reporting for the Temporary Assistance for Needy Families (TANF) program.
- Develop interactive error resolution tool in Flask, documenting 500+ validation & system errors, with filterable views tailored for different audiences.
- Redesign in-app error reports to highlight key elements required for data acceptance, improving grantee usability.
- Provide technical assistance to dozens of State and Tribal governments to ensure accurate and timely data submission.
- Manage team of contractors designing & implementing new features for the TANF Data Portal (TDP), the secure system where grantees submit their program data.

**MGGG Redistricting Lab** — Chicago, IL
*Research Assistant* — *November 2023 – March 2024*
- Worked on Portland Ranked Choice Voting Simulation project with Moon Duchin and the MGGG Redistricting Lab to analyze the impact of a new voting system on election outcomes, focusing on demographic and ideological voter behavior.
- Leveraged high-performance computing clusters to execute batch jobs, running thousands of simulations under various voter behavior scenarios and election parameters using MGGG's Votekit Package to generate strategic campaign insights.
- Analyzed election results across hundreds of simulated scenarios to deliver recommendations for voter mobilization efforts.

**U.S. House of Representatives - House Digital Service** — Washington, D.C.
*Data Science & Fellow* — *April 2023 – October 2023*
- Designed and implemented ETL infrastructure using Python and Microsoft SQL Server for a Committee Scheduling Tool, streamlining data flow and improving efficiency.
- Automated daily performance metric reporting with Python scripting, GitLab CI/CD pipelines, and Docker containers.
- Analyzed user activity and meeting trends to identify strategic interventions that reduced committee meeting conflicts, identified conflict-prone committees; collaborated with outreach liaisons to provide support.
- Conducted user interviews to identify problem space and opportunities to leverage casework data to inform policy-making.
- Authored a technical report with a roadmap for automating extraction, cleaning, and analysis of constituent casework data across various CRMs deployed by member offices.

**Google - Customer Experience (CX) Lab** — Remote, USA
*Dashboard Analyst* — *January 2022 – June 2023*
- Spearheaded revamp of Lab's analytics platform transitioning Tableau dashboards to Google Looker Studio.
- Executed comprehensive statistical analyses of consumer experience data, informing strategic decision-making.
- Created and deployed new dashboards in Looker Studio, catering to evolving research needs of the Lab.
- Established and enforced dashboard update protocol, with emphasis on organization-wide security protocols.
- Directed a cross-functional team of 7 analysts in ongoing maintenance of dashboards, while also providing continuous technical support and guidance.

**San Diego Hunger Coalition** — San Diego, CA
*Data Analyst* — *October 2020 – December 2021*
- Developed models in R to predict food insecurity in San Diego County amidst the COVID-19 pandemic.
- Engineered a comprehensive data extraction process for food assistance data across San Diego County, encompassing state and federal programs (SNAP, WIC, School Meals), and key philanthropic organizations.
- Authored a white paper detailing facets of Food Insecurity within San Diego County.
- Leveraged R and GIS to map and highlight partial patterns of food insecurity, serving stakeholders with actionable insights.
- Delivered expert technical support to non-profits enabling the use of big data for distribution and advocacy efforts.
- Designed a user-friendly food insecurity and assistance dashboard in Google Data Studio, in collaboration with local partners, promoting data transparency and encouraging cross-organization collaboration.

## Skills

- Programming: Python (pandas, beautifulsoup4, scikit-learn, parquet/pyarrow, requests, logging, sqlachemy, PyTorch), R.
- Data Science: Machine Learning, Time Series Analysis, Forecasting, and OLS Regression (linear & logistic).
- Dev/Ops, Version Control, Management: Microsoft Azure, AWS, Docker, Git/Github, Gitlab, Slurm.
- Data Management: Database Management (Microsoft SQL, Postgres), Dashboard Creation (Looker Studio), User Interviews.