KRISTIN CHANG

Email: krchang@design.upenn.edu | Portfolio: https://kristinchang.github.io/portfolio/

SKILLS

City Planning: GIS, Graphic Design (Adobe Illustrator, InDesign and Photoshop), Climate Change and Adaptation Planning, Resilience Planning, Vision Zero, and Social Vulnerability Analysis

Spatial Data Analysis: Python, R, JavaScript, SQL, Esri ArcGIS (ArcMap and ArcGIS Pro), QGIS, Google Earth Engine, GitHub, and Microsoft Excel and Access

EDUCATION

University of Pennsylvania | August 2020 - December 2022, 3.97 Cumulative GPA
Masters of City Planning (Housing, Community, and Economic Development Concentration)
Masters of Urban Spatial Analytics

University of California at Berkeley | August 2014 - May 2018
Conservation and Resource Studies (B.S.), Geospatial Information Science and Technology (Minor)

WORK EXPERIENCE

Research Assistant, Drinking Water Salinization Modeling

University of Pennsylvania, Weitzman School of Design | June 2022 – August 2022

• Developed a supervised machine learning model that predicts groundwater salinity levels in response to sea level rise to better inform drinking water suppliers along the Northeast, Mid, and South Atlantic coast.

• Summarized research of the current state of groundwater salinity monitoring by aggregating USGS and multiple state agencies' data to support advocacy for more consistent data collection.

Data Analyst Intern, Vision Zero

Philadelphia's Office of Transportation, Infrastructure & Sustainability | June 2021 – August 2021

• Performed geospatial analyses on Pennsylvania's Department of Transportation data using ArcMap to inform the city's Safe Routes to School program and Vision Zero Action Plan, allowing planners to make data-drive decisions about which schools and projects to prioritize.

• Created maps throughout self-guided projects that aligned with the city's graphic design and color palette to visualize transportation statistics for the department's Vision Zero Annual Update and shared via ArcGIS Online, supporting various projects with minimal supervision.

Senior Data Analyst, 2020 Census

United Way Bay Area | October 2019 - August 2020

• Informed the implementation of a $3M+ initiative across the Bay Area by compiling data on historically hard to count census tracts and forecasting gaps in planned outreach, resulting in the highest average self-response rates in California's hardest-to-count areas of the largest states across the nation.

• Analyzed large datasets and presented statistical analyses to various audiences, including city officials and non-profit organizations, successfully guiding their strategic plans to be data-driven.

• Aggregated survey responses for 114 organizations and provided reports to State Census team via ArcGIS-based Statewide Outreach and Rapid Deployment (SwORD) platform.

• Self-taught state-selected phone banking and canvassing application (PDI) and built out operational structure for entire region resulting in 100% of hardest-to-count tracts contacted via the app.

• Assembled toolkits and created and led trainings for PDI engaging over 30 organizations and hundreds of volunteers to make 116,000 contacts about the census, driving higher response rates for these tracts in 2020 than in 2010.