## KIERAN MARTIN

# Chicago, IL martinke@uchicago.edu

#### **EDUCATION**

### Harris School of Public Policy, University of Chicago

Chicago, IL

Masters in Public Policy Cumulative GPA: 3.53/4.00 Expected June 2024

Relevant course work: Statistics for Data Analysis I, Statistics for Data Analysis II: Regressions, Statistics for Data Analysis III: Program Evaluation, Data and Programming for Public Policy - Python I & II, Linear Algebra, Machine Learning, Data Engineering, Data Visualization, Advanced Computer Vision with Deep Learning, Big Data and Cloud Computing

## University of Michigan-Ann Arbor

Ann Arbor, MI

Bachelors of Arts, Honors Major in Sociology, Senior Honors Thesis Cumulative GPA: 3.94/4.00 (Phi Beta Kappa, High Distinction)

May 2019

Mott Community College

Flint, MI

Associates of Arts, General Studies

May 2017

Cumulative GPA: 3.78/4.00 (Phi Theta Kappa, High Honors)

## **EXPERIENCE**

## Special Olympics Inc. Research and Evaluation, Data Science

Washington D.C.

December 2020 - Present

- Research Specialist
- Led development of a data collection app, coordinating with developers and 10 key programs (out of 172) for user feedback; designed relational database schema and streamlined data pipeline from collection to warehousing and dashboard integration
- Conducted various descriptive analysis and created data visualizations of health screening and programmatic data for internal and external reports, manuscripts, and conference presentations
- Developed Python programs for translating survey text responses into English and automating the consolidation of program reports into a master list, enhancing data analysis and operational efficiency by 90%
- Collaborated on ETL pipeline development by writing Python code to build calculated tables and devised dynamic template, enabling integration of historical and futures Single Health Evaluation data from 180+ programs into SOI data warehouse
- Created PowerBI dashboard with interactive time series chart, customizable data tables for selecting specific years and metrics for 180+ programs, and integrated quick filters, enhancing data accessibility and user experience
- Collaborated on automated Standard Operating Procedure (SOP) for efficiently downloading, cleaning, and analyzing data from Qualtrics API, enabling comprehensive and insightful reporting across all surveys within account
- Led collection and compiling of data for and from over 100 Health Impact Grant (HIG) reports and sharing of results with SO Programs and major funders
- Managed administrative needs for Research and Evaluation projects, such as editing and formatting reports, supporting development of 10+ presentations, responding to requests for data and literature reviews
- Managed Special Olympics' Qualtrics account, including creating and designing surveys and reports, aggregating results, sending results to SO Programs, and managing license and partnership

## University of Michigan School of Nursing

Ann Arbor, MI

Research Assistant

July 2019 - August 2020

- Merged and cleaned data from multiple UHS patient satisfaction surveys, resulting in a comprehensive dataset of nearly 20,000 responses spanning 8 years
- Executed and documented comprehensive analysis on student healthcare experiences by utilizing SPSS for descriptive analyses, and applying thematic coding to qualitative data to identify key trends and insights
- Developed and applied a codebook for qualitative thematic analysis of 12 focus groups in Dedoose, enhancing understanding of undergraduate students' perceptions of healthcare experiences
- Derived insights from 12 focus groups to design survey questions to identify IDC interactions in patient healthcare experiences
- Investigated responses of Michigan health officials to human trafficking through survey data from 58 facilities, providing a comprehensive overview of official responses and self-identified needs
- Conducted thematic analysis of open-ended survey responses from 58 respondents to obtain a better understanding of needs as health care officials responding to human trafficking victims in care

 Reviewed and assessed 10+ human trafficking screening policies and response protocols to identify areas for improvement, informing best practice recommendations for Michigan healthcare systems

### **University of Michigan Sociology Department**

Ann Arbor, MI

Lab Supervisor/Research Assistant

May 2019 - May 2020

- Designed a 26-item instrument and codebook to analyze 102 U.S. religious universities' student conduct policies to study compliance with Title IX
- Resolved 100+ disagreements and errors from initial coding finished by undergraduate coders to complete the Resources and Reporting coding effort dataset
- Executed descriptive data analysis in STATA of Resources and Reporting Data
- Extracted various examples of problematic policy language examples from data sets to contribute to 2 manuscripts on best practices for Mandatory Reporting Requirements on college campuses

## **University of Michigan Sociology Department**

Ann Arbor, MI

Research Assistant

May 2017 - May 2019

- Investigated US College's compliance with Title IX regulations by analyzing varying degrees of support provided for student survivors of sexual assault, policies on campus sexual harassment and misconduct via 381 colleges websites
- Utilized relevant search terms to collect data from over 100 college websites by locating and extracting web pages with mentions of sexual assault and sexual misconduct
- Conducted 2 independent studies comparing resources and information provided to LGBTQ+ survivors of sexual assault to survivors at 381 US colleges
- Executed open ended coding of 50+ US colleges webpage data, Sexual Misconduct Policies, and Annual Security Reports, to evaluate diverse methods colleges use to support survivors through policy language, reporting processes, interim support
- Examined 100+ Sexual Misconduct Policies and Student handbooks to analyze how schools explain adjudication processes

## **PUBLICATIONS**

Munro-Kramer, M. L., Loder, C., Kalpakjian, C., Martin, K. E., Hess, A., Smith, E., Parrish, D., Ernst, S.(2023). Creating a tool to understand university students' experiences regarding inappropriate, disrespectful, and coercive (IDC) healthcare interactions. Journal of American College Health. doi: 10.1080/07448481.2023.2272190

Lincoln, A. E., Dixon-Ibarra, A. M., Hanley, J. P., Smith, A. L., Martin, K. E., Bazzano, A. (2023). Global report on COVID-19 vaccination and reasons not to vaccinate among adults with intellectual disabilities: Results from secondary analyses of Special Olympics' program planning. PLOS Global Public Health. 3(6): e0001367. https://doi.org/10.1371/journal.pgph.0001367 Munro-Kramer, M. L., Beck, D. C., Martin, K. E., & Carr, B. (2021). Understanding health facility needs for human trafficking response in Michigan. Public Health Reports. doi:10.1177/0333549211048785

## **SKILLS**

Programming: Python, R, MATLAB, SQL, No-SQL: Cypher (Neo4j), MQL (MongoDB)

Data Science Libraries & Frameworks: TensorFlow, Keras, PyTorch, scikit-learn, Statsmodels, NumPy, Plotly, spaCy, NLTK Statistical Analysis Techniques: Linear and Non-linear Regression (Bivariate and Multivariate), Difference-in-differences (DiD), Instrumental Variables (IV), Regression Discontinuity (RD)

Machine Learning & Modeling: Logistic Regression, Bayesian Methods, K-Nearest Neighbors (KNN), Linear Discriminant Analysis (LDA), Quadratic Discriminant Analysis (QDA), Linear Probability Model (LPM), Random Forest, Lasso and Ridge Regression, Leave-One-Out Cross-Validation (LOOCV), Deep Learning

Natural Language Processing (NLP): Topic Analysis, Sentiment Analysis

Cloud & Big Data Platforms: AWS, Azure, Apache Spark, Hadoop, Bash Scripting

Software & Tools: SPSS, Dedoose, STATA, Microsoft Office Suite (Word, Excel, PowerPoint), PowerBI, Tableau, Qualtrics

## **LANGUAGES**

English (Native)

Russian (Intermediate Mid)

### **AWARDS**

James B. Angell Scholar Award for "Students who achieve an "A" record (All grades of A+, A, or A-) for two or more consecutive terms are Recognized as James B. Angell Scholars," four consecutive terms, University of Michigan, 2019
Wise B. Joseph Excellence Award in Sociology "presented to the Graduating student who best embodies the high standards of the Anthropology and Sociology Programs," Mott Community College (\$250), 2017