Kelsey E. Gonzalez

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EDUCATION

PhD, Sociology
University of Arizona • 2022

MA, Sociology
University of Arizona • 2018

MPhil
Trinity College Dublin • 2015

SKILLS

Programming Languages
Python: numpy • pandas • scikit-learn
R: tidyverse • dplyr • tidymodels
SQL • STATA • LaTeX • Bash Zsh • Git

Expertise
Network Analysis • Machine Learning • Data Mining • Predictive modeling • Classification • Regression • Clustering • Dimensionality Reduction • Multiclass Classification • Multilevel Modeling • Association Rule Mining • Text Analysis • Natural Language Processing • Word Embeddings • Topic Models • Recommendation Systems • Interactive Visualization • Survey Design • MLOps

INSTRUCTING

Lecturer
STAT 412: Statistical Programming in R
SOC 303: Health & Society
SOC 101: Introduction to Sociology

Workshops
Advanced Data Wrangling
Intro to R Programming
Data Carpentry: R for Social Science
Software Carpentry: R-gapminder
gganimate: Animated ggplots

PUBLICATIONS

See KelseyGonzalez.github.io for list of my 9 peer-reviewed publications

EXPERIENCE

Senior Data Scientist, Chief Analytics Office | IBM
April 2022 – Present

Senior Data Scientist Intern, Chief Analytics Office | IBM
June 2021 – April 2022
•Produced ML-driven insights into skill gaps and learning recommendations for IBM employees enabling and accelerating reskilling
•Implemented NLP solutions using word2vec and flashtext to extract workforce expertise and gaps to maintain highly skilled workforce
•Designed unsupervised recommendation algorithm to provide IBM employees with actionable recommendations for reskilling
•Evaluated and refined recommendation engine to optimize model parameters to exemplify proof of concept for key stakeholders
•Demonstrated product ownership by creating strong partnerships with stakeholders, transforming data science expertise into tangible business value and delivering a stronger product

Survey Data Coordinator (RA) | UArizona
October 2020 – May 2021
•Developed data wrangling pipeline for 5k+ unique and personalized surveys in English, Spanish, Pashto, and Dari to record a crowd-sourced history of armed conflict in Afghanistan and Colombia for the US Department of Defense
•Developed survey pipeline using R, Python, and the Qualtrics API to deploy surveys into production
•Assessed project state and automate forecasting of coverage to establish future project needs and priorities

Certified R & Tidyverse Trainer | RStudio
Aug 2020 – Present

Senior Data Science Ambassador | University of Arizona
Sept 2019 – May 2021
•Directed 34 data science workshops delivered to 960 participants to foster the next generation of data scientists at UArizona
•Assessed data science needs of college through survey and implemented the Machine Learning Consulting Group
•Consulted 96 projects that concluded in more efficient R and Python code
•Organized Stanford-based Women in Data Science satellite conference with 400 participants (2020,2021)

Curriculum Maintainer & Instructor | The Carpentries
Sept 2019 – 2021
•Collaborate with maintainers to manage GitHub issues and pull-requests to keep the open-source repository current with coding best-practices
•Use Docker, Ruby, Jekyll, and Python to render site on my local server to test and debug code for agile development
•Lead master classes at top colleges in the United States

GRANTS & FELLOWSHIPS

Fellow, Marshall Foundation Dissertation, 2022, $10,846 **Fellow**, Social & Behavioral Sciences Graduate Fellowship, 2021, $9,580 **Grant Awardee**, SICSS Research Grant, 2020, $7193
1st Place, University Libraries Data Visualization Challenge, UArizona, 2020
Fellow, Summer Institute in Computational Social Science, Duke, 2020
Diversity Fellow, Rstudio Conference, 2020, $2435
Fellow, Research Software Sustainability Institute: Python, 2019