# Kelsey Gonzalez, PhD









# WORK EXPERIENCE

#### Senior Data Scientist, Chief Analytics Office — IBM

April 2022 – Present

- Independently perform data querying, interpretation, visualization, feature engineering, model selection, training, validation, OOP, and code testing in Python and lead and mentor team of 4 interns in these skills through model discussions, code reviews, evaluation, and model selection activities
- Lead worksteam and establish workstream vision, roadmap and OKRs and ensure data science product aligns with user and stakeholder needs; coordinate with front-end developers to launch product into production, impacting 270k IBMers
- lead adoption of foundation assets on team ensuring consistent structure and data science operations and reducing team technical debt

## Senior Data Scientist Co-op, 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 word embeddings and flashtext keyword extraction 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

Oct 2020 - May 2021

- Developed survey pipeline using R, Python, and the Qualtrics API to generate and deploy 5k+ unique and personalized surveys in 4 languages on Qualtrics for the US Department of Defense
- Assessed project coverage and automated forecasting of deficits to determine resourcing priorities

#### Senior Data Science Ambassador — UArizona

Sept 2019 - May 2021

- Directed 34 data science workshops delivered to 960 participants to foster the next generation of data scientists at UArizona
- Evaluated College data science needs through custom survey, analyzed results, drafted solutions, and communicated needs and potential solutions to adminstrator stakeholders
- Implemented the Machine Learning Consulting Group and consulted on 96 projects that concluded in more efficient R and Python code for students and faculty
- Organized Stanford-based Women in Data Science satellite conference with 400 participants (2020, 2021)

# EDUCATION

2022	PhD	University of Arizona	Tucson, AZ
2020	MA	University of Arizona	Tucson, AZ
2016	MPhil	Trinity College, Dublin	Dublin, Ireland
2013	BA	Brigham Young University	Laie, HI

## **Publications**

- Jang, Gonzalez, Zeng, and Martínez. 2022. "Correlates of Panethnic Identification: Assessing similarities and differences among Latinos and Asian Americans in the United States" Sociological Perspectives. 65(4):702–726.
- Gonzalez, James, Bjorklund and Hill. 2021. "Conservatism and infrequent mask usage: A study of US counties during the novel coronavirus (COVID-19) pandemic". Social Science Quarterly. 102:2368–2382.
- Hill, **Gonzalez**, and Davis. 2021. "The Nastiest Question: Does Population Mobility vary by Political Leadership during the Novel Coronavirus (COVID-19) Pandemic?". Sociological Perspectives. 64(5):786–803.
- Martínez and Gonzalez. 2021. "Latino' or 'Hispanic'?: The sociodemographic correlates of panethnic label preferences among US Latinos/Hispanics". Sociological Perspectives. 64(3):365–386.
- Hill, **Gonzalez**, and Upenieks. 2021. "Love thy Aged? A State-Level Analysis of Religiosity and Mobility in Aging Populations during the Novel Coronavirus (COVID-19) Pandemic". *Journal of Aging and Health*. 33(5–6):377–386.
- Martínez and Gonzalez. 2021. "Panethnicity as a reactive identity: Primary panethnic identification among Latino-Hispanics in the United States" *Ethnic and Racial Studies*. 44(5):1–22.
- Hill, **Gonzalez**, and Burdette. 2020. "The Blood of Christ Compels Them: State Religiosity and Mobility during the Coronavirus (COVID-19) Pandemic" *Journal of Religion and Health*. 59:2229–2242.
- Coulter, et. al. 2020. "A Study and Analysis of the Treatment of Mexican Unaccompanied Minors by Customs and Border Protection" *Journal on Migration and Human Security*. 8(2):96–110.
- Mannheimer, Milner, **Gonzalez**, and Hill. 2020. "Social Status and White Fragility: Gender and Socioe-conomic Variations.' Pp. 115–127 in *Research in the Sociology of Health Care*. Vol 38, edited by J. Kronenfeld. Castle Hill, Aus: Emerald Press.

# SKILLS

Programming Languages Python: numpy - pandas - scikit-learn

R: tidyverse - dplyr - tidymodels

SQL - LATEX- Bash - Zsh

ML Expertise Natural Language Processing & Understanding (NLP/NLU)

Machine Learning: Classification, Regression, Unsupervised Learning

Visualization: Static, Interactive, Dashboards

Survey Design

Tools Git - Github

Jira - Trello - Clickup

## GIVING BACK

University 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 Last updated: February 6, 2023