

MICHAEL W. KEARNEY, PH.D.

AI & DATA SCIENTIST

mike.wayne.kearney@gmail.com

(816) 447-8650

linkedin.com/mikewk

PROFESSIONAL SUMMARY

Internationally recognized expert in Data Science, Natural Language, and Artificial Intelligence with over seven years of professional experience, strong theoretical and quantitative backgrounds, and a knack for finding and implementing innovative solutions to complex problems.

PROFESSIONAL EXPERIENCE

SENIOR DATA SCIENTIST	<i>BI Team & Data Labs</i>	<i>Aware</i>	2021-2023
------------------------------	--------------------------------	--------------	-----------

- Built scalable training pipeline and model serving infrastructure for natural language models
- Evaluated, improved, and reported on performance of natural language models
- Developed creative solutions for collecting large data sets for accurately training models
- Create rule books and train labelers & annotators to label data
- Analyze user behaviors and diagnose training and model biases
- Mentored junior team members and interns
- Served as the technical liaison to non-technical community or public audience

ASSISTANT PROFESSOR	<i>School of Journalism & Informatics Institute</i>	<i>University of Missouri</i>	2017-2021
----------------------------	---	-------------------------------	-----------

- Developed course curriculum for classes such as Collecting and Analyzing Social Media Data, Social Network Analysis, Introduction to Machine Learning, Emerging Media, Media Theory, and more
- Mentored over 50 graduate students' theses or data science capstones and chaired two computational social science doctoral dissertations
- Developed and researched AI bot detection software for social media analysis
- Served on various university and departmental committees related to data, education, and diversity

INSTRUCTOR/DATA CONSULTANT	<i>Communication & Research Methods Center</i>	<i>University of Kansas</i>	2012-2017
-----------------------------------	--	-----------------------------	-----------

- Conducted data analysis and consulted on interdisciplinary research projects across university system
- Contributed to project automating personalized analytical reports for students in a large school district
- Instructor of record for courses such as public speaking, research methods, and leadership
- Facilitated working groups on data science and machine learning topics

TOOLS

LANGUAGES

Python | R | SQL | Git | JavaScript | Bash | Docker

SERVICES

AWS[S3,Sagemaker,ECR,Athena,Redshift] | Google Cloud

DEV-OPS

Azure | Jira | GitHub | Gitlab | Confluence

DEEP LEARNING

PyTorch | TensorFlow | HuggingFace | Keras

MACHINE LEARNING

XGBoost | FastText | SciKitLearn | TidyModels

DATA SCIENCE

Polars | Pandas | Numpy | Tidyverse | Data.Table

SKILLS

THEORY

Natural Language | Sentiment | Toxic Speech | Opinion & Topic Mining

PRACTICE

Human Annotation | Heuristic & Algorithmic Labeling | Sampling & Bias

METHODS

Transformers | RNN/CNNs | Statistical/Latent/Topic/Networks Models

TEAMWORK

Research Team | Experienced Multitasker | AGILE Project Philosophy

LEADERSHIP

Project Management | Team Supervisor | Committee Member & Lead

EDUCATION

DOCTOR OF PHILOSOPHY (PH.D.)

University of Kansas

Lawrence, KS

2017

Communication & Social and Behavioral Sciences Methodology

MASTER OF ARTS (M.A.)

University of Kansas

Lawrence, KS

2014

Communication & Social and Behavioral Sciences Methodology

BACHELOR OF SCIENCE (B.S.)

Missouri State University

Springfield, MO

2012

Socio-Political Communication

PUBLICATIONS (SELECTED)

PEER-REVIEWED ARTICLES

- [Comparative approaches to misinformation](#), Int. J. Commun.. 2021
- [Exploring gender differences on Twitter with NLP](#), J. Lang. Soc. Psychol.. 2021
- [Collecting and analyzing Twitter data](#), J. Open Source Softw.. 2019
- [Analyzing change in network polarization](#), New Media Soc.. 2019
- [Two tests of social displacement through social media use](#), Inf. Commun. Soc.. 2018
- [Interpersonal goals and political uses of Facebook](#), Commun. Res. Rep.. 2017

POPULAR PRESS ARTICLES

- [March Madness office talk on par with Vegas odds](#), PR Newswire. 2023
- [Doubts cast over Elon Musk's Twitter bot claims](#), BBC News. 2022
- [Using data science to uncover mystery author of Times' Op-ed](#), Rynl. Jnl. Inst.. 2018
- [Trusting News project report](#), Rynl. Jnl. Inst.. 2017

OPEN SOURCE SOFTWARE

- [rtweet: Collecting Twitter data](#). 1,100,000 downloads / 491 citations
- [tweetbotornot2: Detecting Twitter bots](#). 100,000 downloads / 27 citations
- [textfeatures: Extracts features from text](#). 43,000 downloads / 4 citations