

Jonathan Withers

Data Science — Social Science

Ph.D. with 3+ years of experience in teaching a variety of subjects. With a background in physics and music, I excel at both numbers-based analysis and at communicating complex ideas in different ways.

EDUCATION

2010 – 2016 **Harvard University**
Ph.D.

2005 – 2010 **University of Pittsburgh**
B.S., B.Phil

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EXPERIENCE

FALL 2018 - PRESENT

iRobot Corporation Data Science Intern

Analyzed customer data and product usage information for analytics-based solutions. Communicated findings across teams and competencies. Produced data dashboards and reports to support A/B tests and address stakeholder concerns in comprehensive ways. Used SQL, Python, and visualization tools to gather, clean, model, and communicate insights from large datasets.

SUMMER 2018

General Assembly Instructional Associate

In-class teaching assistant for the Data Science Immersive course. Answered student questions covering a broad range of topics, including Python programming, Git/Github practices, statistics, and statistical models.

SPRING 2018

General Assembly Data Scientist in Training

Applied a broad range of data science tools to solve diverse problems, including exploratory analysis, feature engineering, regression, and classification.

2016 - 2018

Salem State University Visiting Lecturer

Taught classes on world music to non-majors, introducing broad global perspectives through unfamiliar music.

RELEVANT SKILLS

PYTHON | NumPy, Pandas, Plotly, Matplotlib, Seaborn, scikit-learn, StatsModels, NLTK, BeautifulSoup, Keras

OTHER SOFTWARE | Tableau, SQL, R, \LaTeX , Microsoft Office, Amazon AWS

PROJECTS

Turkish Song Time Line

Scraped song lyrics of popular Turkish singers from a lyrics website and used topic modeling techniques to cluster them into genres. Organized this data by year and drew correspondences between lyrical themes in popular music and important events in recent Turkish political and social history.

West Nile Prediction

Worked with a team of three to build an effective predictive model for the presence of West Nile infected mosquitoes in Chicago. Created a cost-benefit analysis that could be used in decisions about when and where to spray to limit the spread of disease.

Reddit Comment Classifier

Scraped comments from two relatively popular subreddits, BlackPeopleTwitter and WhitePeopleTwitter. Used Natural Language Processing to train a classifier to predict which subreddit a comment would come from. Uncovered language patterns that differentiate discourse in online spaces.

INTERESTS

Music, Language Learning, Cooking, Camping