F. LUKE WOLCOTT

luke.wolcott@gmail.com
(720)523-3197
lukewolcott.github.io

data scientist / mathematician / concerned citizen

PROFILE

Flexible, inquisitive Data Scientist.
Skilled in full DS pipeline (Python), specializing in deep learning and AI.
— Stanford University Deep Learning Specialization with Andrew Ng
— 2 years tech industry experience combining deep learning and Big Data

Ph.D. Mathematician, expert in topological data analysis.
Five years of experience teaching and conducting research post-Ph.D.
— Taught 30 undergraduate courses. Presented 40+ technical talks.
— Wrote 12 peer-reviewed journal articles, including 6 interdisciplinary.
— Research in topological data analysis explores the "shape of data".

Concerned Citizen.
Traveled to 75 countries and spent 5+ years living/working/volunteering abroad.
Volunteer data science projects described on lukewolcott.github.io.

EXPERIENCE

Edifecs, Inc / Bellevue, WA
2017 – current. Data Scientist. Lead data science projects at Edifecs, with extensive experience and responsibility for each step in the data science pipeline, EDA through product release. Use cases include opioid analytics, 30-day hospital readmission, medication adherence, and high-cost prediction. Built a generic intervention recommendation engine, and used deep learning to implement a scalable record linkage solution that improves upon current state-of-the-art methods to process 100x the data in 60% the time.

Downtown Emergency Service Center / Seattle, WA
2017 – current. Data Scientist. Lead a team of tech volunteers to analyze database of DESC clients in permanent supportive housing throughout Seattle. Built a deep learning model that incorporates caseworker notes via natural language processing (NLP), along with hand-crafted features, to predict clients at risk of costly incidents involving police, ambulance, or property damage.

Data for Democracy / Seattle, WA
2017 – 2018. Led a team to analyze 1.5 GB Indian National Family Health Survey data, investigating women's empowerment issues.

University of Southern California / Los Angeles, CA
2016 – 2017. Full-time Lecturer.

Lawrence University / Appleton, WI
2014 – 2016. Visiting Assistant Professor.

EDUCATION

University of Washington / Seattle, WA
Ph.D. in Mathematics. Topic: Algebraic Topology
Advisor: John Palmieri

Swarthmore College / Swarthmore, PA
Double B.A. (with High Honors) in Mathematics and Physics.

SKILLS

Fluent in: Python (numpy, scipy, pandas, scikit-learn, seaborn), Spark, keras, TensorFlow, SQL, gensim
Proficient with: R (dplyr, ggplot, caret), C, git, emacs/lisp, R-Markdown, Shiny
Conversational in: MATLAB, Processing (Java), Bokeh, Tableau