

Ryan Holben

mathematician • coder • teacher

contact

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interests

analytics
algorithms
data scraping
problem solving
machine learning

education

2007–2013 **Ph.D. Mathematics** University of California, Irvine

2003–2007 **B.A. Mathematics & Physics** Colby College

work experience

2015–Now **Visiting Assistant Professor** Furman University
Calculus, probability, Markov chains, game theory

2014–2015 **Instructor** University of California, Irvine
Calculus, linear algebra, differential equations, TA mentorship

2007–2013 **Instructor & Teaching Assistant** University of California, Irvine
Lower & upper division mathematics through analysis & topology

2006–2007 **Research Assistant** Colby College
Laser lab, model building, C++ for driving experiments

projects

OKC Python, BeautifulSoup, Matplotlib, AWS, MongoDB
Scrapes data from a popular dating website, maintains a database hosted with AWS, and visualizes interesting demographics. Ongoing, aims to use machine learning to classify fake profiles.

Prettify Python, HTML/CSS, Javascript, Markdown
Automatically converts raw text notes for ICS-33 at UC Irvine into a user-friendly website for current students to use. Identifies code, ASCII diagrams, and English language using contextual clues, applying appropriate syntax highlighting.

RedditDB Python, Flask, PRAW, AWS, MongoDB
Precursor to OKC, scraped post and comment data from Reddit, storing in a database hosted on AWS. Used Flask to serve a user-facing website for adding to and querying the database for aggregate statistics.

technology

Languages
Python, C/C++, Lua, HTML/CSS, \LaTeX

Python modules
NumPy, pandas, matplotlib, Seaborn, Graph-tool, scikit-learn, BeautifulSoup, Flask, PRAW

Other
Random Forests, SQL, MongoDB, Amazon Web Services, Git, iPython/Jupyter, Mathematica