RyanHolben

mathematician ∘ coder ∘ teacher

contact

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ryan-holben.github.io

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

2015–2016 **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

AIPACA — C, C++
Coded in a small team, AIPACA is a lightweight library that provides generic asynchronous data transfer using secure keys. Includes ability to create RESTful services, designed for use in any language both client-side and server-side.

RedditDB & OKC — Python, Beautiful Soup, Matplotlib, iPython, Flask, AWS, MongoDB
Pair of full-stack projects built with similar tech. Scraped data from websites into a NoSQL database hosted on AWS. One project used Flask to serve a user-facing website for interacting with the database, the other used iPython notebooks to visualize interesting user demographics.

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.

technology

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

Python modules
NumPy, pandas, matplotlib, Seaborn, Graph-tool, Beautiful Soup, Flask, Selenium, Nose (unit testing)

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