

HELEN CRAIG

<http://www.linkedin.com/in/hacraig> ◇ <http://www.github.com/hlncrg>

craigca5@yahoo.com ◇ (916) 800-3636

Palo Alto, CA

Experience

Fellow at Insight Data Science

SEP-OCT 2015

- Designed a web app, <http://www.bakeAgain.com>, that summarizes recipe comments from allrecipes.com to improve recipe results and give overall impression of completed food creation
- Deployed frontend using AWS, Flask and Bootstrap
- Extracted modification suggestions from recipe comments using NLTK and gensim libraries
- Applied Gaussian Naive Bayes (scikit-learn) techniques to comments data to model modifications suggestions to 70% accuracy
- Utilized Multinomial Naive Bayes (scikit-learn) categorization on recipe reviews and movie reviews to extract food-related comments

Research Assistant in Applied Physics, Stanford University

2009-2015

- Implemented computational models of radio polarization of high energy pulsars and connected to data
- Wrote ray-tracing simulation code for model polarization for pulsars in C that ran on the SLAC computing farm to create libraries of simulated pulsars
- Applied simulated annealing fitting algorithms in C with error calculations for parameters that described the geometrical and emission properties of the pulsars
- Analyzed complex polarization data by using in-depth multi-component model for over a dozen pulsars
- Used Python regularly for data visualization
- Resulted in three first-author publications and four papers from collaborative efforts

Side Projects

<http://www.rangerCampy.com>

2015

- Built website that aggregated data from multiple sources to help plan camping trips and better understand California State Park camping options
- Wrangled data from Twitter API, Yelp API, NOAA reduced weather station data, and Google map API with pandas and sqlalchemy
- Utilized JavaScript, jQuery, AJAX to make user-friendly interface with a AWS and Flask back end

Innovation Farm Volunteer

2014

- Worked with Stanford Technology Licensing to identify promising patent for method in measuring building energy usage and carbon production
- Identified, contacted, and interviewed relevant parties such as patent inventors, owners of companies with similar technology, energy companies, and Stanford housing

Education

Ph.D., Applied Physics; Stanford University

2015

B.S., Physics; University of California, Davis

2009

Skills

Languages

Python, C, Javascript — some experience: C++, Java

Tools

Bootstrap, SQL, Matplotlib, L^AT_EX, LSF

some experience: Pandas, NLTK, scikit-learn, MPI for C++, AWS, Flask