

Nhung Ho, Ph.D

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Experience *Fellow at Insight Data Science*, Mountain View, CA January 2014-present

- Created healthy-me.us, a web app designed to give users information and solutions to the top diseases they are predisposed to.
- Developed likelihood functions for each input group using 10 years of CDC death records and scraped Google search using BeautifulSoup for solutions to managing these diseases.
- Deployed app on Amazon Web Services and designed interactive front-end using Flask and a combination of D3 and Bootstrap.

Graduate Research Fellow at Yale University, New Haven, CT 2007-2013

- Developed reduction pipeline for Subaru Suprime-Cam photometric data, later expanded for use on additional telescopes including CTIO and WIYN, using a combination of IDL and C-shell scripting.
- Expanded popular shape fitting package (*IRAF ellipse*) to include discretized sources.
- Designed full analysis package for N-body data including determining axial orientations using principal component analysis, calculating velocity and velocity dispersion using maximum-likelihood, and full error analysis using Monte Carlo bootstrap.
- Improved upon current methods of spectral line fitting by implementing an analytic, non-linear least square fitting algorithm that has been integrated into a widely used spectroscopic reduction package.
- Measured metallicity profiles of nearby dwarf galaxies and performed full error analysis including Monte Carlo bootstrap and robust two-sided K-S test based on modeled parameters.

Undergraduate Research Assistant at LBNL, Berkeley, CA 2006-2007

- Created in IDL light-curve fitting algorithm to automatically detect possible supernova candidates and built a GUI front end to display light curve.
- Developed Perl script to scrape html database of know supernova candidates for use in follow-up surveys.

Skills Summary

- **Languages:** Python, IDL, BASH and C-Shell Scripting, SQL, Fortran (some experience), C++ (some experience).
- **Tools:** Flask, Twitter Bootstrap, D3, numpy, scipy, pandas, matplotlib, astropy, BeautifulSoup, L^AT_EX, nltk (some experience).
- **Other:** Monte Carlo simulations, Maximum Likelihood analyses, error analysis, astrophysical software development.

Education *Yale University*, New Haven, CT December, 2013
Ph.D, M. Phil., M. Sc. in Astronomy

University of California, Berkeley, Berkeley, CA December, 2006
B.A. in Astrophysics

Honors/Awards Connecticut Space Grant Graduate Fellowship, NASA 2011-2012
Boris Garfinkel Award, *Yale University* 2009