

# MATTHEW R. DAVIS

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JIFFYCLUB@GMAIL.COM

## STATEMENT OF PURPOSE

I love Python, data puzzles, and software problems looking for creative solutions. I want to live in California and make life better for people.

## EMPLOYMENT

*Software Engineer* January 2011 - Present  
Space Telescope Science Institute Baltimore, MD

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- Use the scientific Python stack to develop data calibration and Hubble Space Telescope observation planning tools
- Worked with staff scientists to enhance an HST data processing pipeline with new corrections (<http://j.mp/KYeTJC>)

*Scientific Programmer* September 2008 - January 2011  
Science Systems and Applications, Inc Lanham, MD

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- Provided software and IT support to a NASA scientist at the Goddard Space Flight Center
- Developed software for visualization and processing of Earth science data in a variety of formats, administered a remote web server, and performed scientific analysis
- Nearly all data analysis, processing, and visualization scripts written in Python

*Astronomy Laboratory Lecturer* February 2009 - June 2010  
Community College of Baltimore Country Catonsville, MD

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- Taught Astronomy 102 evening laboratory during Spring and Fall semesters

## VOLUNTEER

*Software Carpentry Instructor/Developer* February 2012 - Present  
[software-carpentry.org](http://software-carpentry.org)

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- Teach Python, shell, git, and software engineering skills to scientists and engineers, at boot camps and in online sessions (<http://j.mp/Rld1me>)
- Develop new instructional content for boot camps
- Layout and design of [software-carpentry.org](http://software-carpentry.org) using Bootstrap
- Advise and administration for the Software Carpentry GitHub repos
- Curate the Software Carpentry Google+ Page ([gplus.to/swcarpentry](https://plus.google.com/+swcarpentry))

## EXPERIENCE

- Python
- NumPy | SciPy | pandas
- matplotlib
- Data analysis & visualization
- C and Fortran
- Git | SVN
- nose | pytest
- Mac OS X | bash
- JavaScript
- HTML | CSS
- Basic SQL
- Google App Engine

## EDUCATION

*Astronomy, PhD track*  
University of Washington

September 2007 - August 2008  
Seattle, WA

*Astronomy, MS*  
San Diego State University

June 2008  
San Diego, CA

*Aerospace Engineering with spacecraft design concentration, BS*  
California Polytechnic State University

June 2004  
San Luis Obispo, CA

## CLASSES

Introduction to Artificial Intelligence  
CS 101 Building a Search Engine  
CS 253 Web Application Engineering  
CS 373 Programming a Robotic Car  
Advanced Python Mastery

www.ai-class.com  
www.udacity.com  
www.udacity.com  
www.udacity.com  
Dave Beazley

<http://j.mp/LyzhzO>  
<http://j.mp/NT1Z3y>  
<http://j.mp/OBomfh>  
<http://j.mp/L49pgv>

## ONLINE

*Blog:* penandpants.com  
*GitHub:* github.com/jiffyclub  
*Twitter:* twitter.com/jiffyclub  
*Google+:* gplus.to/jiffyclub  
*App.net:* alpha.app.net/jiffyclub