Travis L Scholten

http://travisscholten.com travisscholten@gmail.com

FDUCATION

University of New Mexico

PH D PHYSICS August 2012 - Present MS IN PHYSICS June 2015

California Institute of Technology

BS PHYSICS August 2008 - June 2012

LINKS

Github: Travis-S

LinkedIn: **Travis Scholten** Twitter: **@Travis_Sch**

SKILLS

Programming

Competent:

ATEX • Python 2.7

Familiar:

Bash • HTML

Tools

git • Jupyter notebooks • jekyll • Scipy computing stack • Matplotlib • Pandas

Concepts

Statistics • Model Selection

RECENT AWARDS

2017: Brian E Colón Exemplary Service Award: UNM GPSA

2016: Excellence in Ethics Award UNM GPSA

2015: Student Research Grant UNM GPSA

2014: Student Research Grant UNM GPSA

OTHER EXPERIENCE

2017: Organizer, CQuIC Computing Workshop

2016-17: Vice-Chair, GPSA Finance Committee

2015-17: GPSA Council Representative Physics and Astronomy

EXPERIENCE

Sandia National Laboratories | STUDENT INTERN

May 2013 - Present | Albuquerque, NM

Engaged in self-directed and collaborative work with colleagues for my PhD research in quantum characterization, verification, and validation. I am specializing in the use of model selection and hypothesis testing techniques to address such problems.

- Developed from scratch a 1300-line Python code base for scientific computation, as well as Jupyter notebooks for data analysis and visualization
- Learned to use a high-performance computing cluster, including code parallelization techniques
- Presented multiple conference talks and posters about my work

Prescio Consulting | STUDENT INTERN

June 2015 - August 2015 | Casa Grande, AZ Performed model sensitivity analysis for clients.

- Updated a SAS code base for analysis
- Wrote short articles for company website

University of New Mexico | TEACHING ASSISTANT

August 2012 - May 2013 | Albuquerque, NM

Taught undergraduate labs and helped with a graduate level course.

 Wrote personal lecture notes, graded homework assignments, and held office hours

California Institute of Technology | SUMMER UNDERGRADUATE RESEARCH FELLOW

June 2011 - September 2011 | Pasadena, CA

Developed research skills and techniques during a summer project to understand the computational efficiency of a particular adiabatic quantum computation.

- Wrote Matlab code for numerical simulations
- Presented my research at the annual Perpall speaking competition, where I advanced to the final round

PUBLICATIONS

[1] Travis L Scholten and Robin Blume-Kohout. Behavior of the maximum likelihood in quantum state tomography. arXiv:1609.04385.