# Christina Krawiec, Ph.D.

5+ years experience analyzing large data sets with Python, C++, and SQL

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## Experience

**scienceSeeds**

*Science Educator*, Oct. 2018 - July 2019. Curriculum development and after-school class instruction; product, website, and social media management.

**University of Pennsylvania**

*Graduate Student Researcher*, 2013 - 2018. Advised by Gary Bernstein. Used Bayesian methods to select high-redshift objects in the Dark Energy Survey and developed a new method for measuring their gravitational lensing magnification which I implemented in Python; Tested new lensing shear measurement code on simulated galaxies using Python and C++.

**Rutgers University**

*Student Researcher*, 2012 - 2013. Advised by Chuck Keeton. Analyzed gamma-ray burst energy spectra to assess the feasibility of measuring primordial black hole lensing for my Senior Honors thesis project.

*Research Assistant*, Summers 2010 & 2011. Modeled the gravitational lensing effect of stellar planetesimals and clumpy dark matter.

**American Museum of Natural History**

*Research Assistant*, Summer 2012. Advised by Sebastien Lepine. Selected white dwarf stars for potential brown or red dwarf companions using Astronomical databases and color-color comparisons.

## Education

**University of Pennsylvania**

Ph.D, Physics, October 2018.

**Rutgers, The State University of New Jersey**

B.S., Astrophysics, *summa cum laude*, 2013.
History Minor

## Publications

**Astronomers' and Physicists' Attitudes Towards Education & Public Outreach: A Case Study with The Dark Energy Survey**. A. Farahi, R. R. Gupta, C. Krawiec , A. A. Plazas, R. C. Wolf, 2018, JSO Vol. 2, 1-15

**An Accurate and Practical Method for Inference of Weak Gravitational Lensing from Galaxy Images**. Gary M. Bernstein, Robert Armstrong, Christina Krawiec, and Marisa C. March, 2016 MNRAS 459, 4467-4484

## Technical Skills

Python, C/C++, SQL, Pandas, Java, JavaScript, HTML/CSS, Adobe Creative Suite, Google Apps, Microsoft Office Suite, OpenOffice, Jupyter, IDL, LaTeX, GIMP, Pixelmator, iMovie