# Sonya Sawtelle

#### Data enthusiast with a strong background in math, science and programming.

###### [ [sdsawtelle.github.io](http://sdsawtelle.github.io) ] . [ sonya.sawtelle@aya.yale.edu ] . [ 802 461 3429 ]

## Experience

**Data Scientist, Upwork (part-time)** (2017-2018)

* Employed predictive models to drive business decisions such as "How long should we leave job posts open before expiring them?".
* Exploratory analysis and machine learning with Python (SQL for data extraction).
* Communicated results and insights to non-technical employees on product teams.

**Graduate Researcher, Yale University** (2012-2018)

* Simulation and data analysis with Python, MATLAB, and C++.
* Coursework in physics, engineering, and statistics.
* Managed 4 undergraduate assistants.

## Education

**Ph.D. in Applied Physics, Yale University** (2012-2018)

* Six publications (three first-author [[1](https://journals.aps.org/prb/abstract/10.1103/PhysRevB.99.054304)][[2](https://aip.scitation.org/doi/abs/10.1063/1.5051638)][[3](https://iopscience.iop.org/article/10.1088/1361-6528/aae673/meta)])

**B.S. in Physics, Indiana University** (2008-2011)

* Baccalaureate with Departmental Honors and Highest Distinction, 3.98/4.0 GPA

**MOOCs**

* Deep Learning 5-Course Specialization (deeplearning.ai), [Credential ID JKFBV29P5MPS](https://www.coursera.org/account/accomplishments/specialization/JKFBV29P5MPS)
* Machine Learning (Stanford University)

## Skills

**Programming:** Python, SQL, MATLAB, C++, R, git, HTML/CSS, d3.js

**Python Packages:** Pandas, Numpy, Matplotlib, Scikit-learn, PyMC, Scipy, Tensorflow (among others)

## Awards

* **Sterling Prize Fellowship**, Yale University (2013). Awarded to 30 out of 10,500 applicants.
* **IU Founders Scholar**, Indiana University (2012)
* **Baccalaureate with Highest Distinction**, Indiana University (2012). Granted to 5 students.

## Projects

[**GeekBuddy Social Graph and Buddy Finder**](http://sdsawtelle.pythonanywhere.com) (2017)

* A web app that displays the social graph for a user on www.boardgamegeek.com and colors nodes by correlation to the user computed from boardgame ratings data.

[***Evening Sessions: Explorations in Data Science and Python* Blog**](http://sdsawtelle.github.io/blog/output/index.html) (2015-present)

* Authored a series of articles covering a wide variety of topics and tools related to pure Python programming, data science and statistics.