

LOIS KELLER SMITH

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github: loisks317 ◊ blog: loisks.blogspot.com

EDUCATION

University of Michigan

September 2013 - Present

Space Science Masters in 2015, Ph.D. in September, 2016

Michigan Institute of Computational Discovery Certificate, 2016

University of Colorado at Boulder

2011-2012

BA in Physics, Minor in Classics

DATA ANALYTICS SKILLS

Programming Languages

Python, SQL, Bash, IDL, Fortran, C/C++, MATLAB

Python Packages

Pandas, Matplotlib, Numpy, Scipy, F2py, Psycopg2,
BeautifulSoup, Selenium, Spacepy, Davitpy, Jupyter

Software & Tools

HTML, LaTeX, Excel, Mathematica

EXPERIENCE

Insight Data Science

June 2016 - August 2016

Fellow

- Developed a program to analyze Fitness Tracker data and compare results with weather information from Weather Underground, providing user with an analysis how to optimize their activity based on past habits.
- Wrote an API to web scrape Polar Loop Fitness Tracker data
- Data was obtained with Selenium, Data was managed through SQL, Pandas and Scipy were used for analysis, and Matplotlib was used for visualizations

NSF Graduate Research Fellow

September 2013 - September 2016

Graduate Research Assistant

- Analyzed multiple time series satellite data sets (> 1 Tb of data) to explore low energy ion loss in the inner Plasmasphere
- Developed an analytic model to demonstrate loss of ions from increased wave activity
- Developed algorithm to properly account for variability in the low energy ion pitch angle measurements when calculating partial ion densities.

ACHIEVEMENTS

Michigan Institute for Computational Discovery Fellow

Spring 2015

NSF GROW Fellowship Awardee

Spring 2015

Community Coordinated Modeling Center Research Winner

Spring 2015

NSF Graduate Research Fellowship Program Fellow

Spring 2014

Rackham Merit Fellow

Fall 2013

Template Developer for LaTeX

September 2013 - Present

Backpacker and Hiking Enthusiast - have climbed 7 > 14,000 ft peaks