# Jeffrey M. Silverman

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# **Experience**

Insight Data Science

Data Science Fellow

2016—present
Palo Alto. CA

- Created WhereSIOUS (Where Should I Open Up Shop?; <a href="http://www.wheresious.com">http://www.wheresious.com</a>) for the City of San Diego, which allows users to discover how successful their new business will be in a given location.
- Utilized information from nearly 57,000 businesses to predict the future success of 23 types of businesses in 313 neighborhoods in San Diego.
- Shared modeling and analysis results with the Chief Data Officer of San Diego via Jupyter Notebooks on GitHub, produced an interactive web interface using Flask, Bootstrap, Python, CSS, and the Google Maps API, and discussed the project in a blog post for both Insight and the City of San Diego.

### **University of Texas at Austin**

2012-2016

Postdoctoral Researcher

Austin, TX

- Spearheaded nearly a dozen astrophysics research projects involving teams varying from a single undergraduate to 100+ person international collaborations.
- Co-founded Astronomy on Tap ATX (<u>www.astronomyontap.org</u>), a series of free, public astronomy lectures in a pub with monthly audiences of 300 to 400 people from extremely diverse backgrounds.
- Developed 8 inquiry-based astronomy activities for middle and high school students, and trained over 30 educators on how to present astronomy and physics topics in fun and engaging ways.
- Coordinated 88 science outreach events and contributed 22 interviews, press releases, and non-technical science articles for TV, radio, print, and online media.

### University of California, Berkeley

2005—2011

Graduate Student Researcher

Berkeley, CA

- Organized ~27,000 astronomical observations of exploding stars using relational database programming (via MySQL and PHP) and statistically analyzed the data (using IDL, R, and Python).
- Coordinated day-to-day activities of our approximately 20-person research group, including scheduling meetings and other group activities, keeping track of the gathering and storage of data products, and leading and consulting on funding proposals.
- Directly supervised 1 high school and 6 undergraduate students and trained 28 professional astronomers from around the world in astronomical data gathering and analysis techniques.
- Taught 7 courses as a Graduate Student Instructor ranging from introductory undergraduate courses of over 120 students, to graduate-level astrophysics courses.

#### **Education**

University of California, Berkeley, Berkeley, CA Rice University, Houston, TX

PhD in Astrophysics 2011, MA in Astrophysics 2007 BS in Astrophysics 2005, BA in Mathematics 2005, cum laude

#### Skills

**Experienced With:** Python (including NumPy, Pandas, scikit-learn, and Matplotlib), HTML, CSS, IDL, LaTeX **Familiar With:** MySQL/SQL/PostgreSQL, Flask, Amazon Web Service (AWS), PHP, R, MathML/XML

# Honors, Awards, and Publications

- Selected out of over 130 applicants to receive the prestigious 3-year National Science Foundation Astronomy & Astrophysics Postdoctoral Fellowship in 2013.
- Invited to present at 7 astronomy and education conferences throughout the United States with audiences ranging from 20 to 200 people.
- Authored 141 refereed astronomy publications (http://bit.ly/2cr1cHJ), including 13 as first author, since 2007.