

Ezekiel M. Silverstein

ezekiel.m.silverstein@gmail.com

781-454-6611

45 Concord Ave, Somerville, MA 02143

<https://github.com/ezekielsilverstein>

WORK EXPERIENCE

Quantitative Data Analyst

November 2015 – May 2017

CareDash, Cambridge, MA

Utilized Python and Postgresql to create automation projects and tracking applications to improve the quality of email marketing campaigns and traffic sources. Improved the usage of high-performing email templates and subject lines.

Identified high-performing traffic sources to drive users to the CareDash site and leave quality physician reviews.

Undergraduate Research Assistant

September 2011 – Present

University of Michigan, Astronomy Department

Joel Bregman – Professor and Department Chair (University of Michigan, Astronomy Department)

Michael Anderson – Postdoctoral Researcher (Max Planck Institute for Astrophysics)

Collaborated in an analysis of intergalactic environments and double-lobed radio galaxies. Wrote Python code to perform data analysis and statistical tests on databases of double-lobed radio galaxies and galaxy groups to identify if there is a correlation between distance from double-lobed radio galaxy to their galaxy group and the angle at which the double-lobed radio galaxy is bent. Paper pending.

Undergraduate Research Assistant

May – August 2014

University of Michigan, Astronomy Department

Patrick Seitzer – Research Professor (University of Michigan, Astronomy Department)

Participated in the search for geosynchronous orbital debris and participated in a telescope observing run at the Cerro Tololo Inter-American Observatory in Chile. Wrote a JSON script to direct the telescope viewing for the Blanco and Curtis-Schmidt telescopes.

Summer Undergraduate Research Fellow

June – August 2013

NASA Jet Propulsion Laboratory at Caltech

Michael Werner – JPL Chief Scientist

Collaborated in the mission planning of an Explorer satellite telescope for an all-sky, infrared survey primarily aimed at the galactic plane. Focused specifically on observing strategies and potential viewing targets. Wrote a Python script to automate the collection, parsing, categorization and storage of data, spectra and graphs for 1000+ targets.

COMPUTER PROFICIENCY

Languages/Software: Extensive experience with Python, SQLAlchemy, Postgresql, Ruby on Rails (in progress), Selenium WebDriver, Microsoft Office, Mathematica; familiarity with HTML

SKILLS

Programming, Data Analytics, Mathematics, Physics, Fast Learner, Problem-Solving, Analytical Research

EDUCATION

Startup Institute, Boston, MA, Summer 2017

Web Development Track – learned Ruby on Rails

University of Michigan, Ann Arbor, MI, Class of 2015

Bachelor of Science: Physics/Astrophysics/Astronomy major; Judaic Studies minor

Honors Program, School of Literature, Science and the Arts

PUBLICATIONS

“Double-Lobed Radio Galaxies and the Intragroup Medium” - Pending (with Joel Bregman, Michael Anderson).

A probe of intergalactic density using double-lobed radio galaxies.

<http://deepblue.lib.umich.edu/bitstream/handle/2027.42/112090/ezmasilv.pdf?sequence=1&isAllowed=y>

“A Statistical Analysis of Baseball’s Backwards K” - March 2009 (with Ross Silverstein). Determined the frequency of a baseball player striking out “looking” as a function of defensive position.

HOBBIES AND INTERESTS

Sports, Data Analytics, Programming, Science and Technology, Physics, Astronomy, History, Philosophy