Jackson T. Henry

Rochester Institute of Technology Undergraduate Physics Major, Mathematics Minor

Contact Information:

Mailing Address:

Jackson Henry

6000 Reynolds Dr, #0239

Rochester, NY 14623

Phone Number:

1-413-658-7876

Email:

Jackson.henry@ligo.org

Education:

- * Rochester Institute of Technology (RIT) class of 2016
- ❖ Amherst Regional High School (ARHS) class of 2012

include GIA 3.08

Research Experiences:

- * RIT Center for Computational Relativity and Gravitation (CCRG) fall 2013 present
 - Worked, under Dr. Whelan, creating and modifying python scripts to calculate and visualize the detection radius of all the Laser Interferometer Gravitational Observatory (LIGO) detectors.
 - Future work will include creating a combined probability detection map for all LIGO telescopes and overlaying it on a map of the visible universe.

Upcoming presentation at Imagine RIT

UMass Amherst LIGO group, summer 2012

- Updated LIGO summary pages (web pages that display live primary and secondary data channels).
- Began to set up summary pages on LIGO Hanford server.
- Fixed real time plotting on summary pages.

UMass Amherst LIGO group, 2011

Worked for Dr. Cadonati, under her graduate student Dr. Mohopatra, on a visual aid of the r-mode oscillations of a neutron star for use in presentations.

Employment.

RIT CCRG, research assistant (see research experience)

* UMass LIGO group research assistant (see research experience)

❖ Freelance web developer/designer — Built webpages on modern standards and streamlined existing webpages to take advantage of new technologies, summer 2013 Consultant for the Concord Consortium — Explored and reported on inaccuracies in the Next Generation Molecular Workbench physics simulation, using Python, summer 2012.

Computational Skills:

- Languages
 - Extensive experience with Python (Numpy, Scipy, Matplotlib, Mlab, Sympy)
 - Extensive experience with JavaScript (D3.js, Jquery), CSS3, HTML5
 - Mathematica
 - Basic MATLAB and numerical simulation techniques
 - LaTeX
 - Arduino
 - Some experience with the bash shell
- ❖ Operating Systems
 - Ubuntu
 - OSX
 - Windows
- Programs
 - Basic VIM
 - Sublime Text 2

Independent investigations:

- Created online interactive data visualizations for various datasets (e.g. sea level since 14. Cluda 1860, average age of the global population)
- Designed in-browser physics simulations (<u>earth gravity</u>, <u>2d spring</u>)
- ❖ Python programs for various scientific tasks (Discrete Fourier transform, Graphing Calculator, spherical Harmonic visualization, kinematics solver)

Leadership Positions:

Founder and leader of ARHS swing dance club; 2011-2012

Professional Organization Memberships:

LIGO Scientific Collaboration (LSC) 2012-current: 2012-current: Society of Physics Students (SPS)

RIT CCRG 2013-current:

2013-current: STARS astronomy group

UMass Amherst Physics Department Summer 2013.

include imagine RIT stuff (ut-totum)
date and year