

Jared Brooks, PhD

San Francisco, CA • brooks Jared C@gmail.com • +1 (206) 313-1788
brooks Jared C.github.io/ • www.linkedin.com/in/brooks Jared C/

EDUCATION

UC Santa Barbara

- Ph.D. in Physics Mar 2015 – Sep 2017
- Master of Arts: Physics Sep 2012 – Mar 2015

University of Southern California

- BSc in Physics, Minor in Mathematics Aug 2007 – May 2011

RELEVANT EXPERIENCE

Insight Data Science – Data Science Fellow

Jan 2019 – Present

- Developed Python-based web application to help investors select new cryptocurrencies to lower the volatility and risk of their portfolios
- Implemented a machine learning algorithm to discover the appropriate weights for statistical measures of performance that are predictive of lowered future volatility
- Deployed an interactive web-app on AWS using Python, Flask, HTML and CSS

Six Degrees to Joe Rogan – Creator (www.sixdegreestojoerogan.com)

Apr 2018 – Jun 2018

- Enhanced discoverability of new podcasts based on guest lists
- Provided organized and easily searchable database of guests of over 160 podcasts by web scraping and data munging/cleaning using Python
- Included in-depth analysis of network structure to provide insights on who are the most central and influential podcasts and guests

UC Santa Barbara Dept. of Physics – Graduate Student Researcher

Jun 2013 – Sep 2017

- Furthered understanding of stellar explosion progenitors by producing six first-author and three coauthored publications in The Astrophysical Journal
- Focused on using 1D stellar modeling software (MESA) to simulate white dwarf + helium star binaries engaged in mass transfer
- Collaborated with scientists at Caltech, UC Berkeley, UC Santa Cruz, and Bonn University

MESA Summer School – Teaching Assistant

Aug 2012 – Aug 2017

- Supervised annual week long course of lectures and lab-exercises for graduate students, post-docs, and faculty from all around the world
- Prepared and tested the labs in advance of program
- Provided advice, debugging help, and explanations of results for participants

UC Santa Barbara – University Physics Teaching Assistant

Oct 2012 – Jun 2014

- Taught upper and lower division physics and astrophysics classes, from dozens to hundreds of students per class
- Led discussion sections, held office hours, wrote solution sets, and graded homeworks and exams
- Developed valuable communication and leadership skills

Kavli Institute for Theoretical Physics – Research Scientist

May 2012 – Sep 2012

- Documented the MESA test suite
- Increased the usability and understandability of complicated modeling tool
- Centralized knowledge of capabilities of MESA (stellar modeling software used for my PhD dissertation)

SKILLS

Programming:

Python (Scikit-Learn, Pandas, Matplotlib, ...), R, LaTeX, SQL, AWS, git/github, Flask, Django, Plotly, HTML/CSS

Data Science:

Machine Learning, Statistical analysis, Data visualization, Web Scraping/APIs