

Jana Grcevich, PhD

janagrc@gmail.com

Work Experience

Researcher & Outreach Coordinator, Columbia University, New York, NY Oct 2018 - Dec 2021

- Led a Data Science Institute funded undergraduate project comparing the neutral hydrogen gas content in hydrodynamic simulations of dwarf galaxies to telescopic observations
- Created a catalog of characteristics of the Local Group galaxies and led a project exploring and predicting the gas content of galaxies using machine learning techniques

Adjunct Instructor, Cooper Union/City College of NY, New York, NY Sept 2018 - June 2020

- Coded 13 randomized and autograded astronomy labs in PHP/MyOpenMath
- Wrote pair-coding exercises for astronomy and Python skills using Google Colab notebooks
- Developed and taught courses in calculus and non-calculus based introductory astronomy

Data Scientist, Schireson Associates (now "Known"), New York, NY April 2017 - June 2018

- Led post-air analysis and reporting for machine learning-based television advertising campaigns, including building and maintaining Python/SQL codebase
- Summarized multi-million dollar advertising campaign effectiveness based on Nielsen and Comscore defined target audiences and communicated results to national media clients
- Improved simulations used to price algorithmic television advertising campaigns

Data Science Fellow, Insight Data Science, New York, NY Jan 2017 - Mar 2017

- Created Dupe Snoop, a method using Natural Language Processing (NLP) techniques in Python to classify rephrased but identical question pairs from the Quora website

Postdoctoral Fellow, Amer. Museum of Natural History, New York, NY Jan 2013 - Oct 2016

- Ran and analyzed hydrodynamic simulations written in Fortran and run on High Performance Computing systems to study interstellar gas loss and evolution of dwarf galaxies
- Discovered two new local galaxies by cross-correlating observational data sources

Graduate Research Fellow, Columbia University, New York, NY Jan 2009 - Oct 2013

- Created a catalog and calculated the characteristics of isolated neutral hydrogen gas clouds and previously unidentified dwarf galaxy candidates using a custom machine vision algorithm
- Ran a suite of Fortran simulations to quantify gas loss in dwarf galaxies as they orbit
- Conducted and characterized radio telescope observations of gas in dwarf galaxies

Education

Ph.D., Astrophysics, Columbia University, New York, NY Feb 2013

M.S., Astronomy, University of Michigan, Ann Arbor Jan 2009

B.S., Physics, Astrophysics, and Mathematics, University of Wisconsin, Madison May 2005

Skills & Competencies

Python, Git, SQL, Redshift, Data Analytics, Data Mining, Machine Learning, Probability, Statistics, Natural Language Processing, Clustering, Regression, Classification, Data Visualization, Teaching