BENJAMIN PIECZYNSKI

Computational Physicist / Astronomer / Software Engineer

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SKILLS

- Numpy
- Microsoft Office
- Image Processing
- Object Oriented Programing
- Machine Learning
- UNIX/LINUX
- TensorFlow
- SciKitLearn
- Git/Github
- Adobe Illustrator
- Data Modeling
- Numerical Algorithms
- Data Science
- LaTeX

PROGRAMMING

- Python
- Fortran
- MATLAB
- C/C++
- HTML/CSS
- SQL

EXPERIENCE

NASA SPACE GRANT INTERN
NAU NASA Space Grant - Flagstaff, AZ
July 2018 - July 2019

Primary Investigator for a funded project on studying spiral structure in flocculent galaxies.

- Utilized python for data analysis of cluster age distributions.
- Presented findings at the Arizona Space Grant Consortium in Tempe AZ.

STARS GRADUATE ASSISTANT
SDSU Research Foundation - San Diego, CA
July 2022 - August 2022

Summer program where I helped instruct community college and high school students interested in astronomy.

- Mentored a group of students using programming to measure dark matter in spiral galaxies.
- Assisted students in learning python programming. Gave a lecture on redshift using animated python widgets.

N-BODY SIMULATION RESEARCH
Independent Research - Flagstaff, AZ
March 2018 - December 2019

Constructed N-body/SPH simulations to study galaxies with low proportions of dark matter.

- Used GADGET, a cosmological N-body / SPH code written in standard ANSI C, to construct simulations.
- Presented at the Northern Arizona Planetary Science Alliance Poster Session.

STRENGTHS

- Problem Solver
- Team Building
- Consistent / Hardworking
- Lifelong Learner

EDUCATION

MASTER OF SCIENCE - ASTRONOMY
San Diego State University
San Diego, CA
August 2021 - August 2023

BACHELOR OF SCIENCE - PHYSICS AND ASTRONOMY
Northern Arizona University
Flagstaff, AZ
August 2016 - December 2019

AWARDS

HOOPER UNDERGRADUATE RESEARCH AWARD
Northern Arizona University
Flagstaff, AZ
$3000 awarded to study spiral structure in M83 using star cluster spatial distribution.