Jake Reinheimer

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Education:

University of North Texas, Denton, Texas (August 2022 - Current)
Graduate student working towards a Ph.D. in physics.
University of Colorado Boulder, Boulder, Colorado (August 2017 - December 2020)
Bachelor of Arts in Astronomy, Astrophysics focus, graduated *cum laude* with a 3.537 GPA.
Hebron High School (August 2014 - May 2017)

Additional Skills:

- **Eagle Scout   (highest rank in the Boy Scouts)**
- **Fluent in Python and C++ and have experience using each.**
- **Great simulation experience using Python and C++.**
- **Data analysis and database experience using Python and SQL**
- **Experience with astronomical observation and data manipulation with a team**
- Leadership   - Avid Volunteer   -Tri-athlete

Work Experience:

Graduate Student (Full time) *August 2022 - Current*
Research Assistant/ Teaching Assistant / Student
- Working with Dr. Yuan Li to create MHD simulations relating to Jellyfish galaxy interactions.
- Create simulation code in C++ and Athena++, and use cluster supercomputers to run them.
- Parse through simulation outputs in Python for analysis and to search for scientific value.
- Teaching Assistant for two classes, where I manage, assist, and grade around 400 students.
- Published a paper that utilizes machine learning to evaluate cosmological relations in simulations.

Gogo Business Aviation (Full time)
Software Engineer, August 2021 - June 2022
- Created Python functions that used new languages and packages to assist the rollout of the new company-wide Flight Summary Tool, capable of parsing hundreds of data points per second.
- Met and worked with a team to create and implement parsing code, using Influxdb and Grafana, for immense active and working databases and data visualization using SQL.
- Worked with the team and their code as I diligently tested every aspect of the new product.

University of Colorado, Boulder Colorado (about 12 hours a week)
Learning assistant for Physics 1110, August 2019 - December 2019
- Helped teach students difficult physics concepts and assisted their learning.
- Developed an attitude of patience as I mastered teaching and discussion skills.
- Learned important people skills as I interacted regularly with 80+ students.