

Anthony J. Young

Data Scientist

(954) 732-6233 | anthonyjamesyoung@outlook.com
anthonyjyoung.com | LinkedIn: [anthony-j-young](#) | GitHub: [youngant](#)

SUMMARY

A data scientist with a passion for solving quantitative problems and working with large datasets, I am looking to leverage my 8 years of experience working with statistics and machine learning tools in astronomy to tackle real-world problems. I am eager to contribute my skills and expertise to a team dedicated to developing innovative solutions that drive value and generate actionable results for stakeholders.

SKILLS

Computer Languages	Python, SQL, HTML, CSS, Javascript
Python Libraries	Numpy, Pandas, Scikit-learn, Scipy, Matplotlib, Plotly, Tensorflow, Keras
Machine Learning	Linear regression, Regularized regression, Multi-class classification, Natural language processing, Numerical optimization
Quantitative	Statistics, Hierarchical Bayesian inference, Markov Chain Monte Carlo
OS & Platforms	Bash, Git/GitHub, Linux, MacOS, Windows, Jupyter
Other	Technical writing, Public speaking, LaTeX, Object-oriented software design

PROJECTS

- Reconstructing Gravitationally Lensed Galaxy Images with Machine Learning** Sept 2018—Feb 2022
- Developed a new linear regression-based Bayesian modeling scheme for recovering un-distorted 3D images of gravitationally-lensed galaxies. The new method is less sensitive to poor data quality.
 - Applied the new method on both simulated and real data, achieving more accurate image reconstructions and resulting in a 10% increase in peak signal-to-noise ratio with more uniform properties of recovered images compared to previous state-of-the-art methods.
- Building Large Galaxy Survey Results Database** Aug 2019—May 2020
- Processed large volumes of raw telescope data to measure galaxy properties as part of an international team.
 - Independently automated tedious manual data processing workflow in a previously unfamiliar language.
 - Analyzed observations and contributed to telescope observing proposals and peer-reviewed publications.

EXPERIENCE

- Rutgers University** May 2017—Dec 2023
Graduate Research Assistant *New Brunswick, NJ*
- Worked independently to develop solutions to assigned problems as a part of thesis research.
 - Developed an extensible and maintainable software package to run a custom statistical analysis pipeline.
 - Collaborated within an international team to analyze data and report results for multiple projects.
 - Published numerous peer-reviewed research articles and presented results at large national conferences.
 - Mentored 5 undergraduate students with minimal prior experience. Taught them science and programming concepts to complete their projects, resulting in successful presentations of their research to program leaders.

EDUCATION

- Rutgers University**, PhD, Physics and Astronomy December 2023
Florida State University, BS, Physics & Applied Mathematics May 2016