Teagan N. King
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PROFESSIONAL EXPERIENCE

Associate Scientist II, National Center for Atmospheric Research, *CO*   *Jan. 2022 - Present*
- Train and test ClimateNet machine learning models for high-latitude atmospheric river research
- Implemented and presented new land model precipitation streams which improved model biasx
- Published datasets to Climate Data Gateway; improved and documented methods for big data
- Reliably provided subseasonal forecasting to NOAA on weekly basis; test climatological impacts
- Improved and packaged Earth System Prediction python tool; added API, CI, & documentation
- Completed high resolution simulations of gulf coast on HPC systems and developed diagnostics

Research & Instrument Analyst, Space Telescope Science Institute, *MD*   *Sept. 2019 - Dec. 2021*
- Verify and validate calibration of light lost due to diffraction and truncation in James Webb Space Telescope (JWST) Pipeline for each aperture of Near-Infrared Spectrometer (NIRSpec)
- Determine impact of cosmic rays on NIRSpec's target acquisition flats; present algorithms and code review to review board; prepare formal procedures to be used in commissioning
- Act as Data Analyst and Primary Instrument Representative in the Mission Operation Center during JWST commissioning in collaboration with European Space Agency and NASA
- Conduct technical reviews of JWST proposals as Instrument Scientist and iterate with PIs
- Develop web application for automated monitoring of instrument, manage deployments, and generate ReadTheDocs documentation as NIRSpec Team Lead on agile software team
- Carefully calibrate and co-add spectra of FUV galaxies to create a database and high level science products for Hubble's COS Legacy Archive Spectroscopic SurveY (CLASSY)
- Optimize web app test and production servers and advise implementation of atmospheric retrievals using CHIMERA open source software for the ExoPlanet Characterization Tool Kit
- Finalize machine learning software package using natural language processing to match JWST and Hubble proposals with reviewers and minimize bias in selection

Intern, NASA Jet Propulsion Laboratory, *CA*   *May 2018 - Aug. 2018*
- Generated radiative transfer code with MCMC, Python libraries, and line list databases to perform free retrieval of telluric absorption for NESSI, a wide-field spectrometer at Palomar Observatory's Hale 200" telescope, which we used to observe transiting exoplanet atmospheres
- Presented project at American Astronomical Society 233rd Meeting, Conference for Undergraduate Women in Physics, and Whitman Undergraduate Conference

Ceramics Instructor, Studio Arts Boulder, *CO*   *Jan. 2022 - Present*
- Taught 8-week adult ceramics course consisting of ~3hr classes; generated constructive curriculum; volunteer assistant for 7 sessions and paid instructor for 3 sessions.

Mariposa Girls Program Leader, YWCA, *WA*   *Sept. 2016 - Dec. 2018*
- As trained Advocate, generated and taught weekly life skills/empowerment lessons at six schools
- Led field trips for hundreds of fifth grade girls with planetarium shows, self defense classes, and science-themed treasure hunts; organized dozens of volunteers and coordinated with schools

EDUCATION

Whitman College, *WA*   *Aug. 2015 - May 2019*
- Physics-Astronomy Major, Ceramics Minor, Mathematics and Statistics Minor, GPA 3.966
- Women in STEM Club Founder, Society of Physics Students Member, Astronomy/Physics TA
- Phi Beta Kappa, Summa Cum Laude, Walter A. Brattain Scholar ($14k/yr merit scholarship), President's Scholar for Art, Distinguished Achievement Scholar, Undergraduate Honors

SKILLS
- Python, C++, HTML, JavaScript, Fortran, Git, Django, SQL, MCMC, Machine Learning, Excel, LabView, Bash, SolidWorks, OpenSCAD, Mathematica, LaTeX, Maple, JIRA, DataDog
- Public speaking, scientific writing, leadership, collaboration, proficient in Spanish