

# NICOLE KEENEY

## RESUME SUMMARY

Fast-learning, detail-oriented geospatial data scientist with a background in computational earth science research. Highly qualified with python data science modules for visualization, wrangling, and statistical analysis of climate model and remote sensing data.

## WORK EXPERIENCE

### **NASA Goddard Space Flight Center, Cryospheric Sciences Laboratory / University of Maryland**

*Research Assistant (half-time, remote)*

*Jan 2021 – Jan 2022*

*Summer Intern (remote)*

*June 2020 – Aug 2020*

- Developed a cloud-optimized python toolkit to streamline polar climate model validation using satellite data. Project emphasized interactive plotting techniques and data management with Google Cloud and zarr.
- Built an interactive Jupyter Book to highlight python code for evaluation of potential drivers of winter sea ice growth in the Arctic.

### **UC Berkeley School of Public Health, Division of Environmental Health Sciences**

*Junior Specialist (half-time)*

*Jan 2021 – present*

*Undergraduate Student Researcher*

*Oct 2020 – Dec 2020*

- Calibrated a wind erosion model in California using remote sensing-derived vegetation data.
- Performed data extractions and zonal statistics using python and R for various environmental datasets utilizing a high performance computing environment.

### **UC Berkeley, Department of Environmental Science & Policy**

*Undergraduate Student Researcher*

*Oct 2019 – Dec 2020*

- Conducted original research for an undergraduate honors thesis where I evaluated a drought index using eddy covariance flux measurements and a planetary boundary layer model.

### **Berkeley Air Monitoring Group**

*Air Quality Intern*

*Feb 2018 – Sep 2018*

- Performed air quality instrument repair, calibration, and management, including laboratory testing.
- Analyzed quantitative and qualitative health data related to indoor air pollution and impact evaluation.

## PERSONAL INFO

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🐙 github.com/nicolejkeeney

🌐 linkedin.com/in/nicole-keeney

## EDUCATION

### **Atmospheric Science, B.A.**

University of California, Berkeley

📅 Aug 2017 – Dec 2020

GPA: 3.7

## SKILLS

- Python (xarray, pandas, numpy, matplotlib, scipy, cartopy, bokeh, zarr)
- R (netcdf, stars, raster)
- Data visualization
- High Performance Computing
- Google Cloud & Colab
- Model Development & Validation
- Time Management
- Science Communication
- Spanish (conversationally fluent)