

LUCIEN SIMPFENDOERFER

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Skills

Languages	Python, SQL, Unix, Fortran, Matlab
Data analysis	ETL, data cleaning, machine learning, geospatial analysis

Experience

Research Analyst, Millennium Management, *New York, NY* Aug 2019 – Present

- Built end-to-end analytics platform to monitor and forecast US natural gas/power markets.
- Wrote pipelines to reliably ingest, clean, and transform data from dozens of vendors, web, and cloud-based data sources.
- Maintained real-time estimate of historical gas/power supply, demand, and interchange.
- Built, tested, and deployed models to probabilistically forecast S&D out ~2 years, with robust error monitoring/diagnosis and flexibility to quickly adjust long-term assumptions.
- Weather analytics projects involving reanalysis and NWP model output.
- Constructed front-end system to communicate market info to Portfolio Managers.
- Tech stack: Pandas, numpy, scipy, xarray, SQL, scikit-learn, pygam, Dash, Tableau.

Data Engineering Contractor, Flux Tailor, *New York, NY* Feb 2019 – Mar 2019

- Created data pipeline to collect, clean, standardize, and merge public data on over 10 million properties in New York and Maryland.

Graduate Research Assistant, Penn State University, *University Park, PA* Aug 2016 – Aug 2018

- Used ~100 GB of observational and modeling data to study Arctic clouds.
- Debugged and built on a 50k-line, single column climate model in Fortran.
- Lead author on scientific publication.

Education

The Data Incubator, *New York, NY* Apr 2019 – May 2019

- Skills: Pandas, Scikit-learn, TensorFlow, SQL, visualization, web scraping.

Pennsylvania State University, *Summa Cum Laude, GPA 4.0*

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|---|---------------------|
| • MS in Meteorology and Atmospheric Science | Aug 2013 – Aug 2018 |
| • BS in Meteorology and Atmospheric Science | Aug 2013 – Aug 2018 |

University Centre in Svalbard, *Svalbard, Norway* Jan 2016 – Jun 2016

- Research and field experience in the high Arctic

Honors/Awards

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| • NOAA Hollings Scholarship | 2015 – 2017 |
| • Student Marshall, Penn State College of Earth and Mineral Sciences | 2018 |
| • Oral presentation winner, Hollings Symposium | 2016 |