Hannah Siegel

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Portfolio | LinkedIn | GitHub

SUMMARY

Highly organized data science graduate (June 2026) skilled in Python programming, machine learning, and statistical analysis. Experienced in processing, analyzing, and transforming large datasets to communicate clear findings through data visualization. Passionate about using data to develop solutions for environmental and sustainability issues.

EDUCATION

B.S. Data Science, Spatial Data Science – University of Oregon **September 2022 - June 2026**
Minors: Geography, Climate Studies

Cumulative GPA 3.93/4.0 – Dean's List all semesters

Relevant Courses: Data Science, Machine Learning, R, Computer Science, Data Visualization, Stats for Data Science, Linear Algebra, GIScience, Remote Sensing

PROFESSIONAL EXPERIENCE

Data Science Intern – The Aerospace Corporation – El Segundo, California June 2025 - Present

- Developed a scalable Python pipeline to generate a geolocated dataset of wildfire predictors by fusing satellite and spatial data across various formats and sources
- Verified validity of fused, processed data samples by training a simple segmentation model to predict wildfire spread patterns
- Collaborated using GitHub version control and clear documentation to build a reproducible geospatial data processing workflow, managing the complex project from start to finish

Data Science Learning Assistant – University of Oregon – Eugene, Oregon September 2024 - June 2025

- Led weekly tutoring sessions in Python, statistics, and data science fundamentals, guiding students through coursework and fostering problem-solving skills

Data Analyst Intern – Helping Irish Hosts – Dublin, Ireland July 2024 - August 2024

- Cleaned and standardized thousands of contact records, streamlining data imports from Excel/Sheets into HubSpot CRM to match 1,000+ host families with Ukrainian refugees
- Built monthly dashboards with clear data visualizations to optimize customer outreach and engagement strategies

PROJECTS

- **Sustainability and Energy Usage Data Analytics**

Developed predictive models using Python libraries to analyze country-level energy and CO2 emissions data. Performed data preprocessing, exploratory data analysis, inference, and optimization of machine learning techniques via k-fold cross validation and hyperparameter tuning.

- **Remote Sensing Analysis of Vegetation Burning and Regrowth**

Applied random forest supervised classification and NDVI change detection using Python Scikit-Learn, QGIS, and ArcGIS Pro to analyze satellite imagery and quantify post-fire vegetation recovery patterns.

SKILLS

- **Software:** Python (Pandas, Pytorch, GeoPandas, Rasterio, ScikitLearn), SQL, R, Excel, Tableau, ArcGIS Pro, QGIS
- **Data Analysis:** Prediction, classification, modeling, image processing, data cleaning & EDA, database management, visualization, dashboard development
- **Professional:** Problem-solving, collaboration, attention to detail, communication & presentation, leadership, project planning & organization