# **ALEX CLIPPINGER**

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#### **EDUCATION**

## Master of Environmental Data Science, 4.00 GPA (June 2022)

Bren School of Environmental Science & Management - University of California, Santa Barbara (UCSB)

<u>Highlighted Coursework:</u> Machine Learning, Data Visualization, Data Management, Policy Evaluation
(Causal Inference), Remote Sensing, Spatial Analysis, Environmental Modeling, Text & Sentiment Analysis

<u>Teaching Experience:</u> Teaching Assistant - UCSB Department of Economics, Goleta, CA (9/21-Present)

## Bachelor of Science in Economics and Mathematics, 3.66 GPA (December 2019)

Northeastern University - Boston, MA

Minor: Business Administration

<u>Highlighted Coursework:</u> Econometrics, Statistics, Linear Algebra, Differential Equations, Group Theory Involvement: Statistics Tutor (2018), Youth Enrichment Services Volunteer (2018-2020), NU Climbing Team

#### ADDITIONAL EDUCATION/TRAINING

Graduate Certificate in Geographic Information Systems (GIS), 4.00 GPA (April 2021)

Northeastern University - Boston, MA

Volunteer Experience: GIS Volunteer - Old Lyme Land Trust, Old Lyme, CT (10/20-8/21)

#### **MASTER'S CAPSTONE PROJECT**

# Reproducible Machine Learning Approach for Interpreting Ecohydrologic Model Outputs (1/22-Present)

Faculty Advisor: Dr. Naomi Taque, Bren School of Environmental Science & Management

- Creating random forest feature selection algorithm to identify important predictors of forest health
- Developing interactive R Shiny app to expedite exploratory analysis and interpretation of model results

#### **DATA SCIENCE EXPERIENCE**

Data Scientist (Part-Time) - RDN, Inc., Santa Barbara, CA (12/21-Present)

- Implemented time-series forecasts to improve future water demand predictions for water rate analyses in R
- Produce data visualizations and tables in R Markdown to present historical data and communicate predicted water consumption to water district authorities
- Maintain ETL data pipeline on AWS to process, geocode, and store rental data (Python, PostgreSQL)
- Automate generation of 1000+ reports in Python and R for USMC Resident Satisfaction Survey

### **Geospatial Analyst (Intern)** – Sentera, Minneapolis, MN (3/21-8/21)

- Delivered analytics using QGIS, including crop NDVI ratings, to inform farmers on time-sensitive decisions
- Collaborated with engineers, agronomists, and data scientists to quantify in-season agriculture insights
- Processed drone imagery and stitched orthomosaics using photogrammetry software (Metashape, Pix4D)

## **Risk Analyst** - AIR Worldwide, Boston, MA (1/19-6/19; 1/20-1/21)

- Delivered catastrophe bond remodeling files to investors through Touchstone Re
- Produced monthly market summary reports in SQL covering \$30+ billion in outstanding principal
- Managed 30+ remodeling projects for catastrophe bond database transition to Touchstone Re

# **Data Analyst, Supply Chain (Co-op)** - Wayfair, Boston, MA (1/17-6/17)

- Created complex SQL scripts to pull large amounts of data into detailed Excel reports
- Developed analyses that drove a 10,000+ monthly shift of high impact packages from FedEx to UPS

#### **SKILLS**

<u>Data Science:</u> Random forest, gradient boosting, time-series forecasting, econometric analysis, hypothesis testing, familiar with neural networks (RNN), natural language processing (NLP) <u>Programming:</u> Python (Pandas, NumPy), R (RStudio), SQL (SSMS, Postgres), Git, Markdown <u>Software/Tools:</u> ArcGIS (Pro, Online), QGIS, AWS (EC2, RDS, S3), Tableau, Microsoft Excel, Figma