

# Rosanna Neuhausler

University of California, Berkeley | Department of Geography

<https://rneuhausler.github.io>

## Contact

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📍 Berkeley, CA

## Education

### University of California, Berkeley

**Ph.D.** Geography, Earth System Science.

*Adv. Candidacy 2019*

**Ph.D. Minor** Computational and Data Science and Engineering

*2016 - Dec 2021*

**B.A.** Urban Studies

**B.S.** Conservation & Resources Studies

*2012 - 2016*

## Skills

**Methods/Concepts:** Data Science/ML/Statistics, Complex Systems Analysis, Remote Sensing, GIS, ETL pipelines

**Technical:** Python, R, Git, LaTeX, ArcGIS, Illustrator

**Language:** English, German, and Swiss-German.

## Awards

### NASA FINESST

*2019 - 2022*

### ISEECI Summer Research Grant

*2018*

### NSF Research Traineeship Fellowship

*2017 - 2018*

### Berkeley Conference Travel Grant

*2017*

### EWJ Gateway Fellowship

*2016 - 2017*

## Research and Internships

### Ph.D. Candidate

*2019 - Dec 2021*

*Environmental Systems Dynamics Lab, UC Berkeley, California*

Developing an ETL pipeline connected to various REST APIs and Cloud Services for processing terabytes of data used in dissertation. Using ML to extract land use information from satellite imagery. As PM, created collaboration with NOAA and applied for/received funding from NASA for myself and my research assistant.

### Visiting Researcher

*Summer 2017*

*Mathematical Institute, Oxford University, United Kingdom*

Developed a stochastic spatiotemporal agent-based model in Python of coral reef benthic coverages for quantifying spatial competition patterns.

### Research Assistant

*2014 - 2015*

*Center for Catastrophic Risk Management, UC Berkeley, California*

Gathered, managed, and processed terrestrial spatial data in multi-server network for simulating flood impact on California's coastline infrastructure.

### Cal Energy Corps Participant

*Summer 2015*

*Chinese University of Hong Kong, Hong Kong*

Wrote MATLAB functions to semi-automate process of segmenting fisheye images for calculating Urban Heat Island Effect of various building materials.

### Architect Intern

*Summer 2013*

*Ardnt Geiger Herrmann Architecture Firm, Switzerland*

Designed interior features and prepared visualizations for client meetings.

## Select Projects

### Coraleer - Startup development

*Summer 2020*

Participated in Berkeley SkyDeck's HotDesk incubator program to develop autonomous surface vehicles for coral reef surveying.

### Visualizing Voices - Hackathon Winner

*Fall 2018*

Created a webscraper to pull instances of water pollution mentions on blog posts from CA non-profit to detect gaps in government's water quality data.

### Face Recognition on the Edge

*Fall 2018*

Used AI on intelligent edge devices to create a cloud-independent intruder detection system for final project of a graduate Operating Systems course.

## Leadership

### Assistant Data Science Instructor

*Summer 2018*

*University of Tokyo Data Science Boot Camp, Japan*

### Organizer/Leader

*Summer 2018*

*Sagehen Natural Reserve Station Data Camp, California*

### Community Liaison

*Spring 2013*

*Cool California Challenge, California*

### Co-captain/Teammate

*2008 - 2012*

*Pioneer High School Track & Cross Country, Michigan*