Rosanna Neuhausler

University of California, Berkeley | Department of Geography

rneuhausler.github.io

CONTACT

rneuhausler@berkeley.edu

*-***-***-****

Brooklyn, NY

EDUCATION

University of California, Berkeley

Ph.D. Geography, Earth System Science.
Adv. Candidacy 2019

Ph.D. Minor Computational and Data Science and Engineering
2016 - May 2023

B.A. Urban Studies

B.S. Conservation & Resources Studies
2012 - 2016

SKILLS

Methods: Data Science/ML/ Statistics, Remote Sensing, GIS, data pipelines

Technical: Python, R, Git, JavaScript, ArcGIS, Google Earth Engine, Photoshop

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

CURRENT POSITION

Ph.D. Candidate *Fall 2016 - May 2023*

Environmental Systems Dynamics Lab, UC Berkeley, California

Studying the impact of coastal urbanization on coral reefs across 16 countries. Using ML for investigating high-order, nonlinear interactions. Developed data pipeline connected to various REST APIs and Cloud Services for processing terabytes of satellite data used in dissertation. As PM, developed collaboration with NOAA and received funding from NASA for myself and my undergraduate research assistant.

LEADERSHIP

Graduate Student Instructor *Spring 2022*

University of California, Quantitative Environmental Problem Solving

Assistant Data Science Instructor *Summer 2018*

University of Tokyo Data Science Boot Camp, Japan

Data Camp Organizer/Leader *Summer 2018*

Sagehen Natural Reserve Station Data Camp, California

Community Liaison *Spring 2013*

Cool California Challenge, California

SELECT RESEARCH AND INTERNSHIPS

Visiting Researcher *Summer 2017*

Mathematical Institute, Oxford University, United Kingdom

Developed a stochastic spatiotemporal python model of coral reef benthic organisms for quantifying spatial competition and emergent patterns. Github, Paper

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 Sea Level Rise impact on the California's coastal infrastructure. Paper

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. Poster, Blog

SELECT PROJECTS

Art Residency with L'AiR Art at Atelier 11, Paris France *Summer 2022*

Exploring science communication through art. Residency Bio

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. Paper

Social Vulnerabilities, Superfund Sites, and Flooding *Spring 2017*

Comparing discrepancies in social vulnerability indices associated with Superfund Sites and FEMA flood maps based on varying methods of spatial overlay and resampling of census block and point data. RShinyApp