

# Rain Blankenship

rain.blankenship@gmail.com

## EDUCATION

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**Scripps Institution of Oceanography, UC San Diego - La Jolla, CA** 2019 - Present

B.S., Oceanic and Atmospheric Sciences (In Progress, expected completion Spring 2021)

GPA: 3.917

- Transferred to UC San Diego Fall 2019

**Crafton Hills College - Yucaipa, CA** 2015 - 2019

A.A. Mathematics - 2019

GPA: 4.00/4.00

## RESEARCH OUTLOOK

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I am an Oceanic and Atmospheric Sciences major at Scripps Institution of Oceanography, UC San Diego. I am looking forward to continue broadening and deepening my understanding of Earth's processes and how they are influenced by changes in climate. I am interested in processes influencing coastal erosion in polar regions, and subsequent transport of terrestrial sediment and nutrients to marine environments.

## RESEARCH EXPERIENCE

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**Scripps Undergraduate Research Fellowship (SURF), La Jolla, CA** June 21, 2020 - August 21, 2020

*Undergraduate Research Fellow/Intern*

- Participant in 2020 remote summer fellowship program. Received mentorship in graduate school and grant writing workshops, and attended Scripps faculty seminars. Worked with Dr. Sarah Aarons as research assistant on her NSF funded project characterizing the aeolian dust transport and deposition to the Mt. San Jacinto of Southern California.
  - Remote modelling work conducted over the summer focused on creating backwards air parcel trajectories using NOAA's HYSPLIT modelling system. Model trajectories are used to identify seasonal to yearly trends in air parcel trajectories to locate potential local and long-range sources of dust.
  - Field work performed over the summer included collecting dust samples from passive dust collectors and replacing the collector equipment for future sample collection. Field work also included identifying and travelling to local sites that are potential local dust sources.
  - Literature review consisted of research papers covering aeolian dust transport and depositional processes and isotopic and geochemical provenance methods for dust and sediment transport.
  - At the end of the SURF program, I presented my research titled "*Preliminary Characterizations of Aeolian Dust Transport*" at the SURF poster symposium.

**Scripps Institution of Oceanography, La Jolla, CA**

September 2020 - Present

*Undergraduate Researcher*

- Joined Dr. Sarah Aarons' lab as research assistant focusing on modelling and field work.
  - Applied backwards air parcel trajectory analysis using NOAA's HYSPLIT modelling system to GIS software mapping tools. Analysis is used to form layered maps using ArcGIS that will then be overlain by backwards trajectories. This map can then be used to identify regions that are potential dust sources for future sample collection.
  - Field work has included the on-site collection of data from data logger equipment at the collector sites. Future work will include setting up a new environmental monitoring and dust sampling station at a remote alpine site. There are also plans to utilize active sampling equipment to collect samples from potential dust source sites.

## AWARDS AND RECOGNITION

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Scripps Undergraduate Research Fellowship REU at Scripps Institution of Oceanography

June - August 2018

Crafton Hills College Dean's List

2015 - 2019

## PROFESSIONAL EXPERIENCE

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**Dog Handler** - Oodles O'Doodles, Beaumont, CA August 2012 - Present

- Care for and work with several breeds of dogs
- Prepare dogs for therapy and guide work

**Private Tutor** - Morongo Indian Reservation, Banning, CA 2016 - 2018

- Tutored grades 1-12
- Taught algebra and geometry
- Helped students with special needs

### **Sales Associate** –

- Banana Republic, Cabazon, CA November 2013 - January 2014
- Famous Footwear, Cabazon, CA July 2014 - August 2015
- Sketchers, Cabazon, CA November 2015 - January 2016
- Ecco, Cabazon, CA June 2016 - September 2017

Working in retail as a Sales Associate my responsibilities included:

Providing customer service; working as cashier; helping customers with home deliveries; preparing and supplied the sales floor with merchandise; assisting in bringing in, and handling new stock; training employees.

## RELEVANT COURSEWORK

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Elements of Oceanography (A)	Chemical Principles of Marine Systems (A)
Chemistry of the Ocean and Atmosphere (A)	Ice and the Climate System (A)
Introductory Fluid Mechanics (P)	Analysis of Oceanographic and Atmospheric Data (In progress)
Introduction to Physical Oceanography (In progress)	The Physical Basis of Global Warming (In progress)

## AFFILIATIONS

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Native American Research Centers for Health (CA-NARCH) 2019 - Present

- NARCH is a partnership of Indian Organizations committed to increasing the representation of Native American scientists and health professionals.
- As a NARCH student I partake in meetings with other NARCH students, as well receive mentorship on educational planning and academic resources.

## SKILLS

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MATLAB • ArcGIS • NOAA's HYSPLIT • Microsoft Office (Word, PowerPoint, Excel)

## TRIBAL AND COMMUNITY ACTIVITIES

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**Member of Ramona Rancheros 4-H Club** November 2013 - June 2015

- Attended meetings on equestrian care, dog training, and archery.
- Placed 3rd in Riverside County Archery Tournament.
- Demonstrated a dog training and handling session for the Ramona Rancheros 4-H Club with my Golden Retriever.

### **Member, Morongo Birdsingers**

- Group that practices traditional indigenous songs.

### **Cahuilla and Serrano Language Student and Volunteer, The Limu Project**

- Assisted in lesson planning, video editing, and website design.

### **Peon Hand Games Fire Keeper, Traditional Gathering at Morongo**

- Tasks include bringing wood to game sites, maintaining fires, and providing drinks for players.