

# Cullen Molitor

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## Education

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### **Master of Environmental Data Science** | Expected June 2022

Bren School of Environmental Science & Management - University of California Santa Barbara

Capstone Project: Predicting crop yields in sub-Saharan Africa from satellite imagery

Capstone Project Selection Committee

### **Bachelor of Arts in History** | May 2014

Humboldt State University - Arcata, CA

Minors in Mathematics and Scientific Diving

### **Certificate in Marine Diving Technology** | May 2018

Santa Barbara City College - Santa Barbara, CA

ADCI and ADCE Commercial Diving Certifications

## Work Experience

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### **Economics Teaching Assistant** | October to December of 2021

University of California Santa Barbara, Santa Barbara, CA

- Graded weekly essays and term papers

### **Biological Science Technician** | May to October of 2017 to 2021

Channel Islands National Park, Ventura, CA

- Diver for the Kelp Forest Monitoring Program
- Collected algal, invertebrate, and fish data
- Wrote the kelp forest community trend report
- Data entry, QA/QC, analysis, and reporting

### **Second Captain** | July to September of 2019

Truth Aquatics, Santa Barbara, CA

- Driving 75' dive vessel and accompanying skiff
- Vessel maintenance
- Monitoring dive conditions
- Deploying and recovering anchors

### **Commercial Diver** | January to April of 2019

Underwater Construction Corporation, Stevensville, MI

- Commercial diver for nuclear power plants
- Dive station setup and breakdown
- Operating heavy equipment
- Towing large, enclosed trailers

### **Deck Hand** | March 2017 to July 2019

Spectre Dive Boat, Ventura, CA

- Deckhand for a recreational dive boat
- Conducted vessel maintenance
- Monitored dive site conditions
- Deployed and recovered anchors

### **Head of Water Department** | September 2015 to December 2017

Pacific Outfitters, Eureka, CA

- Managed scuba, fishing, and kayak departments
- Taught scuba courses
- Inspected and serviced dive gear
- Equipment installation

### **Director of Scuba** | June to August of 2014 and 2015

Malibu Divers, Malibu, CA

- Managed a youth scuba program
- Taught scuba, first aid, and oxygen classes
- Supervised and trained a dive staff
- Inspected and serviced dive gear

## Volunteer Experience

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### **Education Program Development Volunteer** | October 2019 to present

Channel Islands National Park, Ventura, CA

- Developed an R Shiny web application
- Incorporated monitoring protocols, species ID, data visualization, videos, and photos
- Designed to engage students in learning about scientific diving and kelp forest ecology
- Application example (work in progress)

## Cullen Molitor – Page 2

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### **Scuba Instructor** | August 2014 – May 2017

Humboldt State University, Arcata, CA

- Dive instructor for the Scientific Diving Program
- Assisting in classroom lectures, pool sessions, and open water dives

### **Volunteer Diver** | January 2013 – December 2015

Reef Check California, Mendocino, CA

- Participated in dive surveys
- Data entry and QA/QC

### **Publications**

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Molitor, C.D., McClure, Timothy, I., and others. Channel Islands National Park Kelp Forest Monitoring Program Kelp Forest Community Trend Report for 2005-2019. Natural Resource Report Series. National Park Service, Fort Collins, Colorado. (In preparation)

Molitor, C.D. and others. Channel Islands National Park Kelp Forest Monitoring Program Annual Report 2019. Natural Resource Data Series. National Park Service, Fort Collins, Colorado. (In preparation)

Molitor, C.D. and others. Channel Islands National Park Kelp Forest Monitoring Program Annual Report 2018. Natural Resource Data Series. National Park Service, Fort Collins, Colorado. (In preparation)

Sprague, J.L. and others. Channel Islands National Park Kelp Forest Monitoring Program Annual Report 2017. Natural Resource Report Series. National Park Service, Fort Collins, Colorado. (In preparation)

Sprague, J.L. and others. Channel Islands National Park Kelp Forest Monitoring Program Annual Report 2016. Natural Resource Report Series. National Park Service, Fort Collins, Colorado. (In preparation)

### **Awards**

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2021 MEDS Recruitment Fellowship

2021 Advanced Technology Grant

2019 NPS STAR award for excellence in training Kelp Forest Monitoring Program seasonal staff

2015 PADI Elite Instructor award

### **Skills**

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#### **Computer Languages**

- Fluent: R, Python, Bash, and Markdown
- Novice: HTML, and MATLAB
- Proficient: SQL, CSS, and PowerShell
- Interested in JavaScript and Julia

#### **Computer Software**

RStudio, JupyterLab, Bash, Git, GitHub, Google Cloud Platform, Google Earth Engine, Microsoft Planetary Computer, Docker, Kubernetes, Virtual Box, Microsoft Hyper-V, VMware Workstation, pgAdmin, SQLite, MATLAB, JMP, Tableau, Microsoft Access, Microsoft Office, and more

#### **Boating**

2019 USCG 100-ton Captain's License and Towing Endorsement

2012 California Boating Safety Certificate

2003 Michigan Boating Safety Certificate

#### **Diving**

- NPS Dive Examiner
- Hyperbaric chamber operator
- AAUS scientific diver
- CCR diver (200')
- PADI MSDT
- ANDI occupational nitrox diver
- NAUI Instructor
- Ice diver
- ADCI and ACDE commercial diver
- Cylinder visual inspector