# CLAIRE RAE Hayes, VA, 23072

#### **EDUCATION**

Dual B.S. in Geology and Environmental Science & Policy, cum laude, William & Mary; Williamsburg, VA. 2020

- Senior thesis title: Strain Analysis of Diamictites and Sandstones in the Neoproterozoic Ghubrah and Fiq Formations, Northern Oman.
  - Three-dimensional finite strain analysis, temporal constraint of deformation events, and examination of deformation mechanisms.
- Extracurricular positions: Team Activities Chair, W&M Club Sailing; Geology Tutor, Sigma Gamma Epsilon National Honor Society

A.A. & S.; magna cum laude, Rappahannock Community College; Glenns, VA. 2018

### PROFESSIONAL EXPERIENCE

VIRGINIA INSTITUTE OF MARINE SCIENCE - Gloucester, VA

#### Marine Scientist I

Research position in the VIMS Shoreline Studies Program.

- Produces graphic design figures for Shoreline Management Plans created for federal, state, and private lands using CorelDRAW
- Produces report design layouts using Adobe InDesign
- Plans logistics and performs surveys of beaches and marsh shorelines using real-time kinematic global positioning system, by both land surveys (on foot) and from the water (on boats)
- Performs field site assessments: collects auger sediment samples, documents shoreline attributes with site photography, organizes data collected, and contributes to the editing of reports with data
- Georeferences aerial photography and conducts area calculations of Shoreline Management Plans' physical attributes using ArcGIS Pro
- Proficient in the Microsoft Office Suite, specifically Excel, for data analysis of cost estimates
- Proficient in literature review for reports, using internet searches to learn efficient task practices
- Acts as lab Geotech to analyze sediment field classifications, and in training for using Laser Diffraction Particle Size Analyzer
- In training for using the VibeCore Mini to collect cores in the field

# AMERICORPS - CORONADO NATIONAL MEMORIAL, Hereford, AZ

### **Guest Scientist**

Research position undertaking natural resource management projects.

- Researched geology, hydrology, and speleology of the Basin and Ridge province
- Collected air and water quality data using NADP, CASTNET, and IMPROVE protocols
- Monitored wildlife cameras, handled bats, and removed invasive plant species

# RE TECH ADVISORS, Falls Church, VA

#### Sustainability Associate Consultant, Graphic Designer

Full time graphic design and webinar support position.

- Produced assets such as CSR reports, event programs, event signage, virtual backgrounds, virtual newsletters, online advertisements, case studies, and program powerpoints
- Supported the U.S. DOE's Buildings Initiative annual webinar series, hosting 6,000+ virtual attendees through 30+ webinars each year
- Wrote, edited, designed, and distributed the internal company newsletter

2021 - 2022

2022 - 2023

2023 – Present

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### NORTHERN NECK INSURANCE COMPANY, White Stone, VA

### **Claims & Member Services Intern**

Seasonal internship processing policy and claim payments and archiving claims in ISO database.

- Refined professional communication among departments to meet financial deadlines
- Resolved payment issues while maintaining highest quality customer service \_

### VIRGINIA INSTITUTE OF MARINE SCIENCE, Gloucester, VA

#### **Climate Resilience Intern**

Short term internship creating an educational video on Sea Level Rise in the Chesapeake Bay; developing an online searchable database for tools mitigating effects of climate change; coordinating stakeholder feedback meetings; curating social media posts.

- Supervisor provided additional funding for additional time to increase project quantity
- Developed written, verbal, and cinematic science communication skills

#### FIELD WORK SKILLS

- Chesapeake Bay riverine and marsh systems (Virginia coastal plain) 2024
- 2022 Southeast Arizona Group (Basin and Ridge province metamorphics, Madrean sky islands, Paleogene volcanic deposits)
- 2019 Gladstone, VA (piedmont province metamorphics); Nelson County, VA (Blue Ridge province metamorphics and basement); Williamsburg, VA (coastal geomorphology)
- 2018 Ghubrah Bowl within Jebal Ahkdar massif, Northern Oman (Neoproterozoic deposits, erosional window, metamorphics):
  - Surveys marsh and beach sites using Trimble real-time kinematic global positioning system.
  - Conducts air quality monitoring using NADP, CASTNET, and IMPROVE protocols: parameters including ozone, solar radiation, temperature, wind and wind direction, precipitation, visibility, haze levels, dry and wet deposition, ammonia
  - Proficient in strike, dip, and rake measurement; coastal plain sediment core identification; and rock identification
  - Practiced in stream discharge readings, and ground penetrative radar readings
  - Published projects include Strain Analysis and Geochronology Senior Thesis, and USGS Sponsored Gladstone Geologic 7.5' Quadrangle Map

#### **COMPUTER SKILLS**

Selected software: Microsoft Office applications, Adobe Illustrator, Adobe InDesign, ArcGIS Pro, ESRI StoryMaps, ArcMap

#### **PROFESSIONAL ASSOCIATIONS**

- 2022 Scientists in Parks - Women+ in STEM Scientists in Parks - Pride in STEM Scientists in Parks - DEIJ Change Makers
- Geological Society of America 2021
- 2021 Sigma Gamma Epsilon National Honor Society for the Earth Sciences
- 2021 Geologic Society of Nevada

# clairemrae11@gmail.com (804) 824-3784

2018 - 2020

2019

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### AWARDS AND CERTIFICATIONS

- 2024 Diver Alert Network Adult and Child First Aid/CPR/AED and Bloodborne Pathogens
- 2024 In progress VIMS boat captain's license training
- 2022 Arthur Carhart National Wilderness Training Center Natural Resource Management: Air Quality Arthur Carhart National Wilderness Training Center - Natural Resource Management: Soil and Water Quality ESRI - Essential Workflows
  - ESRI Introduction to GIS using ArcGIS Pro
- 2019 Red Cross Adult and Child First Aid/CPR/AED and Bloodborne Pathogens
- 2018 BoatUS Foundation Boating Safety Course

#### **CONFERENCE ABSTRACTS**

- 2024 **Rae C** and Milligan D, *Life is a beach we're just playing in the sand: Repeat monitoring of living shorelines, Chesapeake Bay, Virginia*, American Shore and Beach Preservation Association National Meeting.
- 2023 Thompson A, Rae C, and Garcia J, Implementing the federal unstable slope management program for geohazards at Chiricahua National Monument, Geological Society of America Abstracts with Programs, v. 55, no. 1, doi: 10.1130/abs/2023SC-385016.
- 2022 Bailey C, Mcaleer R, **Rae C**, and Skelton T, *Quantifying strain and constraining the deformation timing in Neoproterozoic glaciogenic strata from Jebel Akhdar, northern Oman*: Geological Society of America Abstracts with Programs, v. 54, no. 5, https://doi.org/10.1130/abs/2022AM-378199.
- 2020 Bailey, C and **Rae**, C: *Deformation timing and strain in Neoproterozoic strata, Jebel Akhdar, northern Oman*, EGU General Assembly 2020, Online, 4–8 May 2020, EGU2020-12361, https://doi.org/10.5194/egusphere-egu2020-12361.
- 2019 **Rae, C,** Bailey, C and Skelton T: *Strain analysis of diamictites and sandstones in the Neoproterozoic Ghubrah and Fiq formations, northern Oman*, Geological Society of America Abstracts with Programs. v. 51, no. 5 doi: 10.1130/abs/2019AM-336742.

#### VOLUNTEERING

- 2024 Virginia Institute of Marine Science Eastern Shore Lab's Marine Life Day 10 hours total Coordinated with the VIMS Coastal Geology Lab to demonstrate the workings of marine science relative to geology for participants from toddlers to adults.
- 2024 **Middlesex Family YMCA Aerobathon/Spinathon Planning -** 60 hours total Designed marketing content, created t-shirt graphics, sent donation requests, wrote thank you letters, assisted with stakeholder meetings, and decorated for the MDX YMCA's 20th Anniversary Aerobathon/Spinathon which benefited the YMCA's philanthropic efforts to fund children's enrichment programs.
- 2018-24 Middlesex Family YMCA Bright Beginnings Shopping 28 hours total Volunteered each summer to take special needs elementary school students back-to-school clothes shopping.

#### **ADDITIONAL INFORMATION**

Background in environmental science with a personal interest in climate science, environmental justice, and science communication. Educational background reflected by geology coursework and fieldwork with structural geology research experience. Leadership experience and dedicated work ethic cultivated by honor society geology tutoring, William & Mary Sailing Team executive board position, high school and collegiate competitive sailing, blue water sailing crewmanship, and agricultural upbringing. First aid, CPR, and water safety training.