AlanJones



Experience

U.S. Geological Survey New England

Junior Technical Editor
October 2017 - Present

UCSB Department of Earth Science

Graduate Researcher/Teaching Assistant July 2015 - June 2017

UNH Geochemistry Lab

Laboratory Technician May 2013 - June 2015

Roof Maintenance Systems

Maintenance Crew Foreman 2006 - 2012

Education

University of California Santa Barbara

Master of Science in Earth Science, June 2017 3.87 GPA

University of New Hampshire

Bachelor of Science Geology, June 2015 3.77 GPA, graduated Summa Cum Laude with Honors in Major

- Edit USGS hydrology reports for clarity, grammar, and factual accuracy using Microsoft Office and Adobe software to provide the public with clear, accurate science.
- Create and use macros in Microsoft Excel and Word to automate copy editing tasks and improve efficiency.
- Created MATLAB library for data analysis and data visualization of paleoceanographic records.
- Created exercises to teach upper and lower division students data analysis and visualization in Excel.
- Performed lab procedures including acid distillation, titrations, and ion chromatography.
- · Maintained organization and cleanliness of lab.
- Supervised and coordinated 2-5 person crews during maintenance and emergy repairs.
- Developed a comprehensive OSHA-compliant safety program.

Projects

M.S.Thesis – A comparison of four age model techniques for Iberian Margin sediment cores from 0 to 140,000 years ago

Developed computational approach to quantitatively assess uncertainty in climate-proxy age models using data analysis programming in MATLAB and R (paper submitted for peer review).

Honors Thesis – *Geochemical Fingerprinting of Clays in the Belize River Valley*

Developed new isotopic fingerprinting technique for clay soils on the Yucatan peninsula using radiogenic isotope compositions (Sm-ND) measured using ICP-MS. Used GIS for mapping and geospatial analysis during soil-sampling and field surveys in Belize and in subsequent technical reports.

Skills

Quantitative research
Data analysis and visualization
Scientific programming
Matlab

R

Python

Geographic Information Systems

Technical writing

Microsoft Office (Excel, Word, Powerpoint)

Selected Coursework

Graduate Level

- Computational methods for Earth Science
- Climate modeling
- Chemical and Physical oceanography
- Statistical Methods for Earth Science
- Biogeochemistry

Undergraduate level

- Statistical methods for Earth
- Differential equations and linear algebra
- · Calculus I, II, and III
- Isotope Geochemistry