SAM NEITLICH

2220 Sourdough Rd., Bozeman, MT 59715 • 509-699-0722 • sam.neitlich@gmail.com • Born in January 2001

EDUCATION

Montana State University, Bozeman, MT

2019 - present

Junior in Honors Program. Major: Environmental Science (Geospatial Analysis track).

Minor: Computer Science. GPA: 3.97

Liberty Bell Jr./Sr. High School, Winthrop, WA

2015 - 2019

GPA: 4.0, Honors Diploma.

APPLICABLE SKILLS

Remote Sensing

- ERDAS Imagine
- Agisoft Metashape
- Structure-from-Motion
- FAA UAS license and experience capturing imagery with UAS's
- UAS imagery processing
- Knowledge of satellite systems and processing of satellite data
- Remote sensing using R and Python

Computer Science

- R scripting
- Java
- Python
- HTML and CSS

Statistics

- R scripting and knowledge of R packages
- Parametric and nonparametric data modeling

GPS

- Survey grade base stations and GPS receivers
- Real-time corrections
- Ground control points
- Postprocessing of GNSS data

GIS

- ArcGIS Pro, ArcGIS Online, ArcGIS Field Maps, ArcGIS Story Maps
- Python applications for GIS
- Database management and file organization

General Skills

- Soils and landscape pedology
- Watershed hydrology
- Vegetation
- Ecology
- Geology
- Snow science
- Chemistry/biogeochemistry
- Calculus and physics

RELEVANT WORK EXPERIENCE

GIS/Remote Sensing Tech, Geospatial Snow Water and Ice Lab, Montana State University, Bozeman, MT 2021-present

 Assisting on technical aspects of several masters and Ph.D. projects on hydrological models, and snow science, remote sensing of snow distribution

- Building and implementing hydrological and machine learning models
- Flying drones in remote areas and processing data with Structure from Motion (using Agisoft Metashape)
- Using survey grade GPS and ground control points
- Conducting statistical tests and data analysis within R, python, and ArcGIS Pro
- Ongoing research will include additional projects

Sales Associate, Cascades Outdoor Store, Winthrop, WA Winter 2020-2021

- Helped customers rent and purchase skis and other outdoor equipment
- Repaired, mounted and waxed skis and other equipment

Sustainable Ranch Hand, Crown S Ranch, Winthrop, WA Summer 2015

- Moved irrigation lines to insure all fields were getting adequate water
- Repaired broken sprinkler heads and fixed leaks
- Bucked hav

Plant Restoration Technician, Methow Natives, Winthrop, WA Summer 2014

- Watered, weeded and fenced native habitat in riparian areas
- Transplanted and cultivated native plants

VOLUNTEER EXPERIENCE

Science Intern, National Park Service, Kotzebue, AK Summer 2015

- Collected, cataloged and quantified marine debris on remote Arctic beaches for study in 5 Alaska National parks
- Worked with Native Alaskans from remote villages
- Participated in a educational video on the environmental impacts of marine debris

ACTIVITIES. HONORS AND AWARDS

Recipient of Multiple Scholarships

2019-Present

 Received the WUE, MVSA, Brandenburg Memorial and Newman Family and Friends academic scholarships

National Honors Society

2017-2019

• Elected Junior representative

International Club

2017-2019

• Collaborated with classmates to organize, fundraise for and participate in a trip to China and present the trip to the school

Guitar and Bass 2017-present

- Play in two different bands on guitar and bass guitar
- Built an electric guitar

Student Government

2017-18

• Vice President Student Council

National History Day State Competition

2016-2017

• Earned 4th place at State

Honor Roll 2013-present

• Earned Honor Roll 6 consecutive years in high school and three years in college.

Outdoor Activity

2001-present

Avid hiker, backpacker, skier, biker, and explorer