

# Spencer Riley

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## Skills

**Programming Languages** 

R | Python

Bash

Javascript

HTML

Laboratory Proficiency

Oscilloscope

## **Development Projects -**

pacviz:

visualization

Precipitable-Water Model Analysis Tool:

Docker

regression analysis

machine learning

## **Work History**

Sep 05 2017

Present

Research Intern

Sep 06 2016

High School Work Study

**National Security Agency** 

Aug 16 2017

The position required a thorough background check, federal investigation including a polygraph, as part of the application in order to obtain Top Secret security clearance. Most of the tasks that were assigned revolved around clerical work, specifically inventory and data transfer requests added with Inspector General inspection preparations.

#### **Education**

Aug 2017

**B.Sc. Physics** 

**New Mexico Institute of Mining and Technology** 

**Institute of Complex Additive Systems Analysis** 

May 2022

Concentration in Astrophysics and Atmospheric Physics

Minor in Mathematics

**GPA:** 3.26

## **Publications**

Under Review Atmospheric Precipitable Water and its Correlation with Clear Sky

**Infrared Temperature Readings** 

Vicki Kelsey, Spencer Riley, Kenneth Minschwaner Atmospheric Measurement Techniques

#### **Presentations**

Jan 2020 Boston, MA Atmospheric Precipitable Water and its Correlation with Clear Sky

**Infrared Temperature Readings** 

Vicki Kelsey, Spencer Riley

American Meteorological Society Annual Meeting 100

Nov 2019 Providence, RI Atmospheric Precipitable Water and its Correlation with Clear Sky

**Infrared Temperature Readings: Data Analysis** 

Spencer Riley, Vicki Kelsey Physics Congress 2019

## **Research Projects**

Jan 2019

**Precipitable Water Modeling** 

Present

This research is based on developing a computational model of the relationship between daily precipitable water measurements and the atmospheric temperature. The goal of this research is to develop and utilize the relationship using low cost instrumentation to deduce the amount of precipitable water from the effective temperature.

Collaborators: Vicki Kelsey, Dr. Kenneth Minschwaner

Documentation Page: pmat.sriley.dev

Jan 2019

pacviz

Present

Insert Description here

Documentation Page: pacviz.sriley.dev