Spencer Riley

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Skills

Programming Languages

R | Python | Bash | Javascript | HTML

Laboratory Proficiency

Oscilloscope

Development Projects

pacviz:

R | visualization

Precipitable-Water Model Analysis Tool:

R | modeling | regression analysis | machine learning | Docker

Work History

Sep 05 2017 – Present — ***Research Intern*** — **Institute of Complex Additive Systems Analysis**
TBA

Sep 06 2016 – Aug 16 2017 — ***High School Work Study*** — **National Security Agency**
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 – *May 2022* — **B.Sc. Physics** — **New Mexico Institute of Mining and Technology**
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 – Present — **Precipitable Water Modeling**
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: `https://pmat.sriley.dev`

Jan 2019 – Present — **pacviz**
Insert Description here
Documentation Page: `https://pacviz.sriley.dev`