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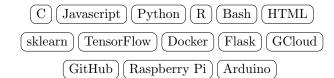
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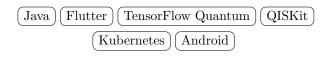


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Development Experience

Currently Learning





Work History

Present

Research Intern

Institute of Complex Additive Systems Analysis

 $05~{\rm Sep}~2017$

The position involved tasks regarding a variety of different projects around the theme of complex systems analysis. As a part of a team, I have worked on projects regarding data preprocessing for language detection models, analysis of RF and Bluetooth models, and Internet-Of-Things research and development.

16 Aug 2017

High School Work Study

National Security Agency

06 Sep 2016

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

May 2022

B.Sc. Physics

New Mexico Institute of Mining and Technology

Aug 2017

Astrophysics and Atmospheric Physics Option

Minor in Mathematics

GPA: 3.28

Publications

Accepted

Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared **Temperature Observations**

Vicki Kelsey, Spencer Riley, Kenneth Minschwaner Atmospheric Measurement Techniques 10.5194/amt-2021-130

Presentations

Jan 2020 Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared

Boston, MA **Temperature Readings**

Vicki Kelsey, Spencer Riley
American Meteorological Society Annual Meeting 100

Nov 2019 Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared

Providence, RI Temperature Readings: Data Analysis

Spencer Riley, Vicki Kelsey Physics Congress 2019

Research Projects

Jan 2019

Present The Precipitable Water Project

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: docs.pmat.app

Development Projects

Under AtmosAccess

Development A Python package to retrieving atmospheric data. The goal of this project is to easily

connect with the NOAA Data Access API and the Suominet database to consolidate PMAT

dependencies.

Maintained pacviz

v1.0.1 A R package comprised of informal, radial data visualizations for regression and

comparative analysis.

Documentation Page: pacviz.sriley.dev

Maintained Precipitable-Water Model Analysis Tool

v2.0 An open source software suite for the analysis of precipitable water.

Documentation Page: docs.pmat.app