# Sean V. Saliga

SciCapt 

▼ Personal Webpage

#### **PROFILE**

Physics and engineering oriented student with various skills from CAD and circuit designing, to coding with Python, MatLab, etc. Wishing to put to use an affinity for science and research for improving people's lives.

## **EDUCATION**

Bachelor's in Physics, University of Florida

Aug 2020 – May 2023 | Gainesville, Florida

3.87 GPA, Physics & Math Minor, Expected Graduation May 2023

Associates's in Arts,

Aug 2018 – May 2020 | Tarpon, Florida

St. Petersburg College / Countryside High School 4.0 GPA, Aerospace Engineering, Graduated with Diploma and AA

# **PROFESSIONAL EXPERIENCE**

Research Assistant, University of Florida

Aug 2021 - Present | Gainesville, Florida

- Conducted experiments and data analysis of silicon optical properties
- Collected various kinds of data on optical crystals used for Faraday Isolators in LIGO
- Simulated alternate forms of the LIGO optical layout to test designs for future detectors

#### Math Tutor, Mathnasium

Jan 2019 - Aug 2021 | Clearwater, Florida

- Successfully taught upwards of four to five students at once
- Practiced mathematical skills up to calculus to remain fluent in ability to teach
- Maintained ability to communicate student's results to parents well

#### PRIMARY SKILL SET

#### **Programming**

- Python / MatLab / C++ / HTML
- Machine Learning / SKLearn
- Data Analysis
- Linear Algebra
- Physics simulations
- Image manipulation

#### **Computer Design**

- LTSpice (Circuit simulations)
- SolidWorks / TinkerCAD
- 3D Printing / calibration

#### Circuitry

- 3 Years of experience in building and testing circuits
- Operated oscilloscopes, signal generators, multimeters, etc.
- Background with operational amplifiers, inverters, AC and DC voltage converters, high DC voltage, MHz oscillators, etc.

#### **Soft Skills**

- Problem Solving / Critical Thinking
- Dedication / Patience / Enduring

### M HOBBY PROJECTS

Personal Project Page: (https://scicapt.github.io/Projects)

- Custom Machine Learning Package (Project Page: pypi.org/project/mcnets/ ☑)
- Chess and Chess AIs in Python (https://github.com/SciCapt/Chess\_Completed 🗷)
- Custom Engine Designing / Building (https://scicapt.github.io/DiscEngine 🖸)
- Custom Radio Transmitter / Receiver (https://scicapt.github.io/Radio 🗷 )
- Various Physics Simulations / Visuals