Sean V. Saliga

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📍 Clearwater, Florida, 33761, United States

🪪 PROFILE

Electrical Engineer with a Physics, Research and Math background. Skills consist of CAD (SolidWorks, LTSpice), Coding, Circuitry design, construction, and testing, Applied Calculus and Differential Equations, and more.

🎓 EDUCATION

Bachelor's of Science, *University of Florida* 08/2020 – 05/2023 | Gainesville, Florida
3.84 GPA, Physics Major & Math Minor

Associates's in Arts, *St. Petersburg College / Countryside High School* 08/2018 – 05/2020 | Tarpon, Florida
4.0 GPA, Aerospace Engineering, Early College Program (Graduated with Diploma and AA)

🧠 PRIMARY SKILL SET

Circuitry I		Circuitry II		Coding & CAD	
- Electronic Hobbyist	(+5 Years)	- High Voltage Supplies	(3 Years)	- Python	(5 Years)
- Oscilloscopes	(+5 Years)	- LTSpice Simulations	(2 Years)	- MatLab, C++, C#	(2 Years)
- Signal Generators	(5 Years)	- Spectrum Analyzers	(1 Year)	- LTSpice	(2 Years)
- Schematic Design	(4 Years)	- PIC Microcontrollers	(1 Year)	- SolidWorks/TinkerCAD	(2 Years)

💼 PROFESSIONAL EXPERIENCE

Jr. Electrical Engineer, *Electronic Design Associates* 05/2023 – 08/2023 | St. Pete., Florida
- Expedited a ~2 year backlog of circuit development in aeronautical and medical industries (i.e. IEC 60601)
- Discovered and Corrected 2 fatal flaws in existing circuit schematics related to inter-circuit connectivity
- Successfully decreased transformer-induced RF noise in medical-related circuits by 140% of a 5dBm goal
- Operated precise testing tools like oscilloscopes, spectrum analyzers and >1 kV AC/DC shorting testers
- Designed an alternative LC charging model by creating and solving a differential equation system

Research Assistant, *University of Florida* 08/2021 – 05/2023 | Gainesville, Florida
- Completed >12 silicon optical property data collection runs, then transformed, cleaned, and analyzed the data
- Assembled 2-3 optical table setups and used a ~100W laser for testing 3 Faraday Isolator crystal candidates
- Simulated and optimized 2 alternate LIGO optical layouts for beam power, accuracy, and practicality

Math Tutor, *Mathnasium* 01/2019 – 09/2020 | Clearwater, Florida
- Managed teaching 4-5 students simultaneously, each in a different subject of Mathematics

🔧 CIRCUIT DESIGN (PROJECT)

Independent Course/Personal Project
For the final project of my circuitry-focused Physics Lab I course at UF, I continued designing a MHz oscillator from a personal project to create two circuits -- a transmitter of a specific frequency, and a receiver for that frequency. In the end, I demonstrated both working correctly across ~8m in the lab room using 9V batteries.

View the project, schematic, and some of the story on my personal page here:
https://scicapt.github.io/Radio ⌞

❇ HOBBY PROJECTS

- **Personal Projects Page: (https://scicapt.github.io/Projects)** ⌞
- **3D Modeling for Engine Designing and Building** (https://scicapt.github.io/DiscEngine ⌞)
- **Monte-Carlo Machine Learning Package** (https://github.com/SciCapt/MCNN ⌞)
- **Programming Chess and Chess AIs in Python** (https://scicapt.github.io/Chess ⌞)