

# Dakota Richline

✉ drichline@pm.me | ☎ (321) 831-5599 | 📍 Melbourne, FL | 🔗 perilune.space

## Skills

---

<b>Linux</b>	(2016-present) Desktop and servers: Podman, package maintenance, LaTeX, git, bash/fish
<b>Amateur Radio</b>	(2017-present) Amateur satellites/ISS, RTL-SDR, digital modes (FT8, SSTV, DMR), basic antenna and station setup
<b>Programming</b>	Some experience with scientific computing; mostly MATLAB with some Julia and Python
<b>Electronics</b>	Soldering, ESP32/Arduino capstone project with basic sensors
<b>Precision machining</b>	(2017-2023) CNC turning/milling, GCode, metrology/quality control, CAD/CAM modeling, 3D printing

## Education

---

### B.S. Aerospace Engineering with Astronautics Emphasis

Melbourne, FL

FLORIDA INSTITUTE OF TECHNOLOGY

2020 – 2024

- GPA: 3.59, Credits: 133

#### Relevant Coursework:

- Space Vehicle Control and Dynamics (MATLAB)  
Programmable satellite dynamics simulator, 3D coordinate transformations, quaternions, PID controller
- Control Systems (MATLAB)  
Classical control theory, PID controls, state-space representation, system dynamics, Laplace transforms
- Aerospace Computational Techniques (MATLAB)  
Numeric methods theory and analysis, scientific programming, linear algebra and differential equations
- Computer-Aided Engineering (Simulink, ANSYS)  
Dynamics simulation and analysis, structural simulations, finite-element analysis
- Orbital Mechanics (Julia, Python)  
Scientific computing
- Systems Engineer, EduSat Team  
ESP32, electrical power system, basic sensors

## Work Experience

---

### CNC Machinist

Melbourne, FL

LIVE FREE ARMORY

May 2023 – August 2023

- Machined and inspected firearm components

### Manufacturing Engineering Intern

Sarasota, FL

EXACTECH INC

May 2022 – August 2022

- Machined titanium and polyethylene medical implants
- Metrological and quality analysis of implants and surgical instruments
- Set up, adjusted, and programmed Mori NLX Turning Machines

### CNC Machinist

Sarasota, FL

EXACTECH INC

May 2021 – August 2021

- Machined titanium medical implants
- Measurement and quality control
- Set up and adjusted Swiss lathes
- Complied with standard operating procedures

## **CNC Operator**

JENKINS MACHINE INC

- Set up machines and ran production parts
- Finished surfaces and performed media blasting
- Modelled parts in Solidworks
- Edited gcode

*Bethlehem, PA*

*September 2019 – July 2020*

## **Information Technology Intern**

NORTHAMPTON AREA HIGH SCHOOL

- Two years repairing machines at the IT helpdesk
- Provisioned, repaired, and maintained computer equipment for the school district

*Northampton PA*

*June 2019 – August 2019*