Dakota **Richline**

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Skills

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

Education

Florida Institute of Technology   *Melbourne, FL*
Senior in Aerospace Engineering with Physics Minor   *2020 – December 2024*

- GPA: 3.62, Credits: 127

  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

Live Free Armory   *Melbourne, FL*
CNC Machinist   *May 2023 – August 2023*

- Machined and inspected firearm components

Exactech Inc   *Sarasota, FL*
Manufacturing Engineering Intern   *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

Exactech Inc   *Sarasota, FL*
CNC Machinist   *May 2021 – August 2021*

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

Jenkins Machine Inc   *Bethlehem, PA*

CNC OPERATOR   *September 2019 – July 2020*

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

Northampton Area High School   *Northampton PA*

INFORMATION TECHNOLOGY INTERN   *June 2019 – August 2019*

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