

# Christopher McCormick

<https://linkedin.rommac100.com> | [rommac100@gmail.com](mailto:rommac100@gmail.com) | (520) 661-2791 | Tempe, AZ

Github – <https://github.rommac100.com> | Website – <https://blog.rommac100.com>

## Summary

---

A Masters Electrical Engineering Student with a background in RF and embedded systems development. Although, that does not stop me from indulging in other topics such as Quantum Mechanics, Power Electronics and IT.

## Education

---

**B.S.E in Electrical Engineering**

**GPA: 3.71 - May 2023**

**Masters in Electrical Engineering**

**(4+1) Graduating May 2024**

**Arizona State University**

**Focus: RF Design & Embedded Systems**

**Tempe, AZ**

## Technical Skills

---

**Programming:** C/C++ (Proficient), Python (Proficient), Java (Proficient), Assembly (Intermediate), Bash (Proficient), Matlab (Proficient), Verilog (Proficient), VHDL (Intermediate), Git (Proficient)

**Lab Equipment Experience:** Spectrum Analyzer (Intermediate), Oscilloscope (Proficient), Logic Analyzer (Proficient), Multimeter (Proficient), Software Defined Radios (Intermediate), VNA (Intermediate)

**Simulation Experience:** HFSS (Intermediate), ADS (Intermediate)

**PCB Design:** KiCad (Proficient), LTSpice (Proficient), Soldering (Proficient), SMD Rework (Proficient).

**3D Modeling & Printing:** Fusion 360 (Intermediate), Filament Printing (FDM), Laser Sintering (SLA)

**Certificates:** ARRL Amateur Radio License (KJ7TZG)

## Professional Experience

---

**General Dynamics Mission Systems: RF Design Engineer (40 hr./week) 08/2023 – Current**

- Lead Test Engineer for RF Modules for Space Payload.
- Maintain status reports on Modules.
- Perform Root Cause analysis on any failures.

**General Dynamics Missions Systems: RF Design Engineering Intern (40 hr./week) 05/2023 – Current**

- Evaluated Texas Instrument ADC for future mission utilization.
- Created analysis scripts for SFDR, SINAD, IP3.
- Utilized RF Test Equipment – Spectrum Analyzer, Signal generators, Vector Network Analyzers

**General Dynamics Missions Systems: Systems Test Integration Intern (10 hr./week) 06/2022 – 05/2023**

- Developed and maintained Python test scripts for payload testing.
- Debugged payload operation using RF testing equipment.

**ASU Interplanetary Initiative Lab: Research and Project Intern (20 – 30 hr./week) 09/2021 – Current**

- Integration & Software Development Lead for Lightcube
- Designed PCB for rapidly developed NASA funded project – Exocam
- Designed PCB for 6U Cubesat payload - SPARCS
- Lead Technician for RF Equipment and Vibration Testing System.
- Contributed to Open Source Radio Development - Planet OpenLST Radio

## Papers

---

**2021 Small Satellite Conference - Deployable Optical Receiver Array Cubesat**

- Contributor for the UHF Radio Section

## Side Projects

---

**RISC-V Experimentation:**

- Explored the new ISA and published documentation for beginners.
- Experimented with GPIO, PWM, I2C using assembly.

**FPGA Development:**

- Bit-banged various communication protocols (Ethernet-IEEE802.3, HDMI, VGA, SPI, I2C).
- Worked with both Altera and Xilinx FPGAs and familiarized myself with their respective IDEs.
- Developed Simple Pong Game for VGA testing.

**Custom Car Blinker:**

- Developed custom pcb with microcontroller for custom replacement blinker.
- Has custom fault detection capabilities (user configurable to allow for both incandescent and led bulbs).