

MACKENZIE HAWKINS

📍 Canal Winchester, Ohio 43110 📞 (330) 604-3846 ✉️ mjh137@zips.uakron.edu

✍️ PROFESSIONAL SUMMARY

Capable RF Engineer with **7+ years of professional industry experience** working in challenging fast paced environments. Possesses wide range skill set including **RF, SI, electronics, simulation, programming, and mechanical**. Excited about opportunity to take next career step.

📁 EXPERIENCE

◆ Battelle Memorial Institute | Columbus, OH

March 2020 - Current

RF | CE Engineer III

- **Principal Investigator** of 6 successful government sponsored programs
- **Designed and Developed** 14 successful mixed signal high speed PCBs (6+GHz) from high-level program requirements to delivered demonstrable systems
- **Led** lab testing and performance measurements of custom RF system hardware including **Measurement** of S-parameters (conducted and radiated), EIRP, NF, radiation pattern, thermal, and power.

◆ IEC Infrared Systems | Middleburg Heights, OH

September 2014 - March 2020

Electrical Engineer

- **Designed and Developed:** custom PCBs, system configuration schematic drawings, wire harnesses, and PCB test fixtures from concept to product
- Performed new product **Performance and Validation Testing**
- Created **Process Documentation** and test procedures for production products and **Reviewed** engineering change orders

◆ OpenPPG

September 2018 - April 2019

Freelance Engineer

- **Designed and Developed** custom battery monitoring system PCBs
- **Consulted** in system architecture design
- **Developed** prototype evaluation software for custom PCBs

◆ The University of Akron | Akron, OH

August 2018 - May 2019

Graduate Assistant

- Assisted **Teaching** of undergraduate students embedded systems and basic electrical engineering
- **Conducted** office hours tutoring
- Graded course assignments and **Managed** grade-books

◆ Saint-Gobain Crystals | Hiram, OH

🔧 SKILLS

- **SI/PI and ECAD Simulation:** Ansys SIwave, Keysight ADS, Keysight Genesys, QUCS, LTSpice
- **Test and Measurement:** Vector Network Analyzer, Spectrum Analyzer, Oscilloscope
- **PCB Design:** Altium, KiCad, Eagle Cad, Easy-PC PCB CAD
- **Programming:** Python, Matlab, C, MAT
- **Math CAD:** MATLAB, Mathematica
- **ERP Software:** Macola, Agile
- **General:** Program Planning, Trouble Shooting, Time Management, Engineering Corrective Actions

May 2014 - August 2014

Electrical Engineer

- **Tested** quality and performance of scintillators and **Documented** processes
- **Designed and Constructed** subsystems for production
- **Serviced and Maintained** test equipment

Univ. of Akron Research Foundation | Akron, OH

February 2014 - April 2014

Freelancer Engineer

- **Designed** hydroponic growing station for commercial use
- **Designed** hydroponic lettuce bowl for consumer use

 **EDUCATION**

May 2019

Master of Science (M.S.) - Engineering Management

The University of Akron, Akron, OH

- *Grade Point Average:* 3.795 / 4.0
- *Technical Electives:* Optical Electronics & Photonic Devices, Electrical Properties of Materials and Nanostructures, Information Theory, Advanced Analog Circuits & Systems, Digital Signal Processing, VLSI Circuits & Systems, Stochastic Processes & Communication

May 2018

Bachelor of Science (B.S.) - Electrical Engineering

The University of Akron, Akron, OH

- *Grade Point Average:* 3.388 / 4.0
- *Technical Electives:* Digital Communication, Power Electronics, Embedded Scientific Computing, Embedded Systems Interfacing, VLSI Design, Wireless Communications
- Recipient of the 2018 Outstanding Student Engineer in Electrical Engineering Award
- First Place Recipient of the 2018 Dr. C. F. Chen Student Award for Design Excellence

 **ADDITIONAL INFORMATION**

Please visit my website for additional information about my experience, education, and projects. <https://www.mackhawkins.com/>