Jessica C. Harding

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EDUCATION

Case Western Reserve University, Case School of Engineering, Cleveland, OH — May 2022
Integrated B.S./M.S. in Electrical Engineering, concentration in Circuits and Hardware — **GPA: 3.89/4.00**
Honors/Awards: Dean's High Honors, Rewrite the Code Fellow, The Electrical Engineering Service Award, Women in Tech Scholar
Scholarships: Case Alumni Association Scholarship, University Merit Scholarship
Relevant Coursework: Applied Circuit Design, Data Structures, Designing IoT Edge Devices, Digital Systems Design, Digital Logic Laboratory, Electronic Analysis & Design, Electronic Circuits, Leading People, Semiconductors, Signals & Systems, Women in Orgs

SKILLS

Coding Languages: Java, Python, C/C++, Verilog, MATLAB, SQL, Assembly, VHDL, Flutter, Dart, HTML, CSS
Software Skills/Tools: Eagle, LTSpice, CorelDraw, Git, SolidWorks, Mentor Graphics, ModelSim, Docker
Prototyping Skills: PCB Layout/Routing, Soldering, 3D Printing, Laser Cutting, Waterjet Cutting
Licences: FCC Amateur Radio License: Technician Class

PROFESSIONAL EXPERIENCE

Rockwell Automation, Mayfield Heights, OH
Embedded Software Co-Op, *developed firmware for an industrial I/O module* — Jun 2020 - Present
- Reduced debugging time by writing a Python script to track how and where the product's memory is stored
- Wrote C++ integration tests to verify features such as UART driver functionality and error escalation handling
- Collaborated with the hardware team to develop an input filter that meets signal and safety timing requirements
- Discovered and resolved errors through static analysis to make C++ code MISRA compliant
- Increased communication speed and reduced CPU utilization by implementing direct memory access(DMA)

GXC, Middleburg Heights, OH
UI/UX Intern, *developed an education app with contextualized translations for non-native speakers* — Jun 2020 - Aug 2020
- Applied Dart and Flutter to develop a cross-platform compatible education application
- Processed JSON data from server requests and used SQL for database requests to populate responsive widgets

Case ECSE Dept, Cleveland, OH
Teaching Assistant, *for Introduction to Circuits general education class* — Oct 2019 - May 2020
- Taught multiple 40 person classes proper use of oscilloscopes, function generators, and power supplies
- Instructed students on fundamental circuit concepts and their applications in practical construction
- Graded and provided feedback on labs and exams

think[box], Cleveland, OH
Prototyping Technician, *on a makerspace's design and development floor* — Aug 2018 - May 2020
- Led team of four in the design of a device that processes an image to be drawn with an XY plotter
- Processed gerber files to route custom printed circuit boards
- Designed and taught courses in circuit design and 3D printing
- Performed troubleshooting on machine malfunctions to determine solutions in a timely manner
- Understood project goals and made design recommendations to local innovators

Terves, Euclid, OH
Safety Intern, *implemented workplace protocols to meet OSHA standards* — May 2019 - Aug 2019
- Designed and built a machine to cut experimental filament into pellets
- Implemented a new chemical inventory system that facilitated access to safety data sheets and reduced misplaced chemicals
- Developed a preventative maintenance schedule and instructional documentation for industrial machinery

AFFILIATIONS & COMMUNITY SERVICE

Member - **Tau Beta Pi Engineering Honor Society** — Mar 2020 - Present
Member - **Institute of Electronics and Electrical Engineers (IEEE)** — Jan 2019 - Present
Member - **Women in Science and Engineering Roundtable (WISER)** — Aug 2017 - Present