

# Joe Maloney

270-586-1286

jgmalo01@louisville.edu  
**Portfolio:** [joemaloney.dev](https://joemaloney.dev)

602 Ruggles Pl. Louisville,  
KY 40208

|                  |  |  |
|------------------|--|--|
| <b>Education</b> | Bachelor of Science in Electrical Engineering<br><i>J.B. Speed School of Engineering</i> | Expected May 2026<br><i>University of Louisville, KY</i> |
|------------------|--|--|

|               |  |  |
|---------------|--|--|
| <b>Skills</b> | Schematic Capture<br>Embedded Development<br>PCB Testing/Troubleshooting | PCB Layout<br>Workload Management<br>Board Assembly/Rework |
|---------------|--|--|

|                        |   |  |
|------------------------|---|--|
| <b>Work Experience</b> | <b>Forst and Associates</b><br><i>Electrical Engineering Intern</i><br><ul style="list-style-type: none"><li>Developed a deep understanding of AutoCAD, finding optimizations for our workflow and creating guides for company-wide implementation</li><li>Managed project files, creating scripts for ingesting and normalizing CAD files from other platforms, greatly increasing the speed that clients can provide updates to our teams</li><li>Communicated with clients in-person, via email, and over the phone to ensure our designs stayed aligned with their needs</li><li>Created electrical construction drawings with AutoCAD, researching electrical codes and industry best practices to produce quality, code-compliant designs</li></ul> | <b>May 2024 – December 2024</b><br><i>Louisville, KY</i>               |
|                        | <b>Olive Garden Italian Restaurant</b><br><i>Cook, To-Go Server</i><br><ul style="list-style-type: none"><li>Planned and coordinated production, packaging, and delivery of large catering orders weeks in advance</li><li>Managed relations with guests over the phone and in person</li><li>Handled cash and maintained accuracy</li><li>Created a new salad making process to increase production to 100+ salads per hour</li></ul>  | <b>June 2023-Present</b><br><i>Louisville, KY</i>                      |
|                        | <b>Cracker-Barrel Restaurant</b><br><i>Server, Cook, Dishwasher, Production Cook</i><br><ul style="list-style-type: none"><li>Trained new team members in various positions</li><li>Communicated with guests and attended to guest needs</li></ul>  | <b>April 2020-June 2023</b><br><i>Louisville, KY &amp; Franklin KY</i> |

|                           |   |
|---------------------------|---|
| <b>Applied Experience</b> | <b>Custom Calculator</b><br><ul style="list-style-type: none"><li>Schematic Capture in Altium designer, implements new MagPack DC-DC converter from TI to reduce PCB footprint</li><li>Used multi-board design features in Altium to avoid errors interfacing STM32 control/power supply board, keyboard, and OLED display driver board</li><li>Troubleshooted and tested design with multimeter and oscilloscope to determine needed updates to new revisions</li></ul>  |
|                           | <b>ESP32 IoT Follower/Subscriber counter</b><br><ul style="list-style-type: none"><li>Utilized EAGLE for schematic capture and board layout</li><li>Built google cloud backend (Typescript) and embedded application (C++) to fetch data, reducing the need for OTA updates when adding new features for users</li></ul>  |
|                           | <b>Embedded Electrical Design</b><br><ul style="list-style-type: none"><li>Schematic capture and board layout of Spartan-7 FPGA development board</li><li>Schematic capture and board layout of small (3cm X 4cm) thermocouple thermometer</li><li>Schematic capture, board layout and assembly of high power (90W) PWM led driver</li><li>Built relay-based exterior lighting controller for Christmas lights with Arduino</li><li>Built LED matrix display clock, developed application code with Platform IO (C++)</li></ul> |

|                                |  |
|--------------------------------|--|
| <b>Activities &amp; Honors</b> | Work 30 hours per week throughout college<br>Eagle Scout |
|--------------------------------|--|