Isaiah Hajabolhassan

801 West 4th ave, Stillwater, Oklahoma 74074

Education

Bachelor of Science in Computer and Electrical Engineering

Expected Graduation May 2026

Oklahoma State University

Stillwater, OK

Relevant Coursework

• Electrical Design and Applications

 $\bullet\,$ Machine Learning

• Embedded Systems Design • Computer Architecture

Experience

Oklahoma State University

January 2022 - May 2024

IT Help Desk Shift Lead/IT Technical Support Specialist

Stillwater, OK

- Developed programs through Power Automated to complete tasks that a person would usually do
- Provided guidance and mentorship to junior phone agents, offering assistance, answering questions, and fostering their professional growth.
- Implemented rigorous quality control measures, meticulously reviewing tickets to ensure compliance with established standards, thereby maintaining a high level of service quality.

M.W. Bevins Co. May 2025 – August 2025

Research and Development Engineering Intern

Tulsa, OK

- Assisted in redesigning and automating several tools used around the production facility
- Developed and Researched a tool to be able to detect energized cables underground without having to make physical contact with the wire

New Product Development Center

May 2024 - Current

Computer and Electrical Engineering Intern

Stillwater, OK

- Designed and developed PCBs using Kicad for custom electrical projects, ensuring proper functionality through rigorous design processes and designed BOM's for manufacturing
- Programmed and installed PLC's to automate industrial systems for midsize manufacturers using stepper motors and VFDs with HMIs as interfaces
- Worked with inventors to develop prototypes for their products while educating them on the product design and development process

Projects

Off Shore Drill Plug Automation: | Python, OpenCV, VBuilder(Ladder Logic)

- Designed and oversaw the automating and assembling of plugs for offshore oil rig drills. By using a collection of PLCs to control pneumatic pumps and robotic arms to place glue and corks into the plugs
- Implement and design new software to improve the efficiency of the machine from 30 seconds to complete the task to 15 seconds and thus doubling the efficiency
- Used OpenCV for computer vision to detect the plug location and the holes in the plug and used CAN communication between a CPU, robotic arms, and PLCs to give exact coordinates on where to place the corks

Impact Drill for Power Lines: | Kicad, C, Visual Studio Code

- Helped design, develop, and built several remote-use impact drills using Bluetooth for linemen on up to 500KV Power Lines
- Reversed-engineered a PCB to prevent obsolescence
- Used a Faraday's Cage and ESD(Electro Static Discharge) Protection circuit design to protect the Circuit boards from the EMF or shocks emitted from Power Lines

Friction Welder: | VBuilder(Ladder Logic)

- Co-lead a team of engineers to design, develop, and build a friction welder designed for industrial environments to weld pipes
- Mentored and taught the team of engineers in proper design process techniques when developing this project
- Designed the BOM for manufacturer

Technical Skills

Languages/Software: Python, Java, C/C++, LaTeX, SystemVerilog, HTML, CSS, MatLab, PSpice, Kicad, AutoDesk Fusion, Power Automate, Visual Studio Code, Microsoft Office, Visual Basic, GitBash, Git, Assembly