

Xavier Johnson

901-647-2175

xjohnso5@vols.utk.edu

LinkedIn : [linkedin.com/in/xavier-johnson-41a092199](https://www.linkedin.com/in/xavier-johnson-41a092199)

Coding Projects: <https://github.com/Mtowncoder>

Portfolio: <http://tweb.utk.edu/~xjohnso5>

EDUCATION

University of Tennessee Knoxville

- Major: Mechanical Engineering | GPA: 3.68 | Sophomore | Expected Graduation Date: May 2024
- Robotics Club

WORK EXPERIENCE AND PROJECTS

Siemens Healthineers, Knoxville, TN | Mechanical Engineering Co-op | May 2021- Jan 2022

- Designed sheet metal parts for assemblies in Siemens NX 12 and communicated with suppliers to get quotes.
- Created a tolerance stack-up to find angular displacement between two parts on an assembly to ensure the misalignment of the belt drive was in allowable range.
- Communicated to different suppliers and engineers to order parts for assemblies

Bosch Home Appliances, Oak Ridge, TN | Quality/Design Engineer Co-op | August 2020-Jan 2021

- Designed different parts using principles of plastic part design in NX 12 and used 3-D printing to rapidly prototype parts to ensure proper functionality.
- Developed a Python script that communicates to Home Connect API Simulators and could change Fridge/Freezer Temperature, get current setting-states/temperature, and log action of engineer in an SQL database. Also created Graphical User Interface (GUI) to allow engineers to easily use features and input data.
- Designed parts for refrigerator assemblies and drafted new refrigerator assemblies in NX 12 and Teamcenter PDM
- Assisted quality engineers in developing a data analytical software program in Excel to reduce time sorting through failure symptom data and filter necessary information.
- Analyzed failure symptom and AR exchange data in excel and automated data entry tasks

University of Tennessee | Undergraduate Research Assistant | Robotics Lab | February 2021 – Current

- Assisted in researching the use of robotic camera systems in minimally invasive surgeries (MIS)
- Designed and prototyped housing for electrical components, and actuator and driver board assemblies in SolidWorks
- Designed parts and assemblies that connected housing to force torque sensor, and housing to an actuator assembly

Wagner General Contractors | Summer Help | June 2019 – July 2019

- Assisted construction workers in daily work and maintained a clean work environment while working at various locations in the city
- Worked at Shelby Farms and wheelbarrowed rocks down incline into holes and tightened nuts to support the Climbing Nest.
- Assisted workers in drilling wooden slabs into metal slabs for seating.
- Performed interior demolition at Riverdale Elementary, hammered out ceiling tiles, cut wires and rebar, and to open up space

Lazy Dog Robot – EF 230 – Python Project – Spring 2020

- Created a speech recognition robot in Python that understands different commands and responds and/or performs an action.
- The robot can tell the weather by utilizing an API, say different phrases based on input, give the time and date, and send an email including various resources that are tailored towards engineers.

SKILLS & INTERESTS

- Software:** SolidWorks, Siemens NX 12, MATLAB, Python, Teamcenter
- Technical:** FEA (Nastran), Tolerance Stack-ups, 3D Printing, Data Analysis
- Interests:** Robotics, Product Design, Research and Development, Space Exploration, Innovation