

**SKILLS**

- **Programming:** Python, LABVIEW, Arduino, Julia, MATLAB, C++, HTML/CSS, Javascript
  - **CAD Modeling:** Solidworks, Inventor, Fusion 360
  - **Finite Element Analysis:** Solidworks, Inventor, Fusion 360
  - **Tools:** Lathe, Mill, Drill Press, most Woodworking Tools
  - **Electronics:** Arduino, Raspberry PI, Oscilloscope, Soldering, MULTISIM circuit simulator
  - **Rapid Prototyping:** 3D Printing, CNC Routing, Laser Cutting
  - **Software:** Symbolab, Excel, VBA, LATEX
- 

**EXPERIENCE & PROJECTS**

## Scintillation Counter Project

- Led a team of 6 that built a device to measure levels of ionizing radiation, using low-cost hobby electronics.
- Designed and prototyped a digital circuit on breadboard and used a Raspberry Pi running Python for signal processing
- Designed 3D printed enclosure for device

## UCLA Transfer Student Hackathon 2021

- Led team of 3 to design an autonomous Arduino robot to move a payload
- Designed a payload mechanism in Solidworks then optimized the design with FEA to achieve a safety factor of 10.
- Built team website using HTML, CSS, and Javascript ([hackathon.brianburrous.com](http://hackathon.brianburrous.com))

## Burrous Brothers Company

*I.T. Technician*

- Created a web app to input customer information into a database
  - Used python to scrape data from Excel and input it into database
  - Maintained networking devices, computers, and printers
- 

**EDUCATION**

## UCLA Samueli School of Engineering

2021–23

- Cumulative GPA: 4.0
- Pursuing BS in Mechanical Engineering, Class of 2023

## Santa Rosa Junior College

2018–21

- Cumulative GPA: 4.0
- Certification in Manual Machining