

**Email:**  
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**Phone:**  
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**Portfolio:**  
<https://hwd2002.github.io/portfolio/>

## Skills:

### Coding experience:

MATLAB  
Lua  
Python  
Linux Shell Scripting

### Graphical Design experience:

CATIA  
- Drafting  
- 3D Design  
Adobe PhotoShop  
Adobe Illustrator  
PowerPoint  
Clip Studio Paint  
Hand Sketching & Drafting

### Miscellaneous Skills:

Soldering/PCB Repair  
Electronics Prototyping  
Electronics Repair  
P.C. Hardware  
Excel  
Word  
PowerPoint

# Harrison W. Davis

## Student Experience

- **Embry Riddle:** *rising Sophomore, Mechanical Engineering.*
- **Rowan-Cabarrus Community College:** *Associates of Science*

## Work Experience

### **Table 11 Restaurant**, Concord, NC: June 2021-June 2024

- Food Prep/Cooking: *including shopping, food prep in kitchen.*
- Maintaining Kitchen Machinery: *including dishwasher, electric scales, various appliances.*
- Small Business Work: *needed to adapt and change priorities on the fly.*

### **Protodyne Machine Shop**, Harrisburg NC: Aug 2017-Feb 2020

- Machine Work: *assisted in maintenance and operation of the CNC mills and lathes in the shop.*
- Manual Work: *manually sanded down parts utilizing band saws, cut metals into machinable blocks, and ensured the finished products were within acceptable deviation.*

## Personal Projects

### Game Development

- 3D rendering engine: *made a simple 3d engine from only basic components to learn the math behind computer graphics (dot products, matrix multiplication, etc.)*
- Neural Network: *implementation of a simple neural net into a small game with evolution-styled "learning".*
- Image Compression Algorithm: *recreating the methods of storing sprites on a Gameboy cartridge.*

### Physical Projects

- Computer Building: *built four desktops over time for different purposes.*
- Electronics Repair: *managed to repair to usable condition 5 separate laptops and desktops that were non-functional due to hardware damage. Additionally I've repaired an Ipod classic, several smartphones, and miscellaneous appliances.*
- UAV Building: *designed and built multiple fixed-wing UAVs (&UGVs) and flown them as a hobby. The biggest one had a wingspan of 5ft.*
- Misc. College Engineering Projects