

## **EDUCATION**

### **UNC Asheville & NC State University, Asheville, NC** | *Part-Time* | *Jan. 2021 – Present*

- Senior pursuing a Joint Bachelor of Science in Engineering – Mechatronics Concentration

### **AB Tech Advanced Manufacturing Center, Asheville, NC** | *Apr. 2023 – May. 2023*

- Programmed and Operated Haas Mills and Lathes

### **Durham Technical Community College, Durham, NC** | *Aug. 2018 – Dec. 2020*

- Associate of Applied Science in Information Technology – Software Development
- Diploma of Information Technology – Software Development

#### ***Honor Societies:***

- Phi Theta Kappa International Honor Society
- Gamma Beta Phi Honor Society

## **EXPERIENCE**

### **Quality Engineering Co-Op** — *BorgWarner, Arden, NC* | *Jun. 2025 – Aug. 2025*

- Investigated assembly line failures; performed dimensional inspections for compliance.
- Applied FMEA and Ishikawa tools to drive root cause analysis and corrective actions.
- Designed workspace improvements in Creo and NX to support continuous improvement.
- Partnered with suppliers to resolve quality issues and ensure standards alignment.
- Updated Acerta control limits using Minitab (UCL/LCL) to improve statistical process control.
- Added defect type/location codes in SAP to enhance traceability across assembly lines.

### **CI Engineering Intern** — *Dodge Industrial, Weaverville, NC* | *Jun. 2023 – Aug. 2024*

- Supported Continuous Improvement and Quality teams on engineering projects.
- Designed and fabricated the Adjustable Flange Press (5-leg planetary gear tool) to safely hold heated flanges.
- Reverse-engineered rubber Sleeveoil® inserts for in-house production and cost reduction.
- Increased work cell efficiency by fabricating custom organizational tools for machinists.
- Reviewed SolidWorks sketches; documented errors and recommended corrections.
- Authored work instructions for Sleeveoil® housing delivery processes.
- Conducted SolidWorks and 3D printing training sessions for managers and engineers.
- Programmed a Fanuc CRX-10iA/L robot for automated palletizing.

### **Student Supervisor** — *UNCA STEAM Studio, Asheville, NC; Part-Time* | *Jan. 2022 – Present*

- Built circuits and machined parts for animatronics featured in the NC Winter Light Show.
- Designed and fabricated a spring-loaded prototype device and multiple shop efficiency solutions.
- Reviewed and revised Fusion 360 CAD models to improve manufacturability.
- Applied 3D scanning to capture human models for 3D printing.
- Completed custom fabrication jobs commissioned by external patrons.
- Taught Fusion 360 to students, and MIG welding to youth and adults.

- Produced a video tutorial for OMAX Waterjet operations.

### **Web Services Intern — NC Central University, Durham, NC | Aug. 2020 – Dec. 2020**

- Produced event and announcement pages using Drupal.
- Resolved broken links using Siteimprove.
- Collaborated with a team tasked with upgrading the capabilities of a Dialogflow chatbot.
- Created web forms and updated webpage contents.
- Composed technical articles (knowledge base articles).
- Produced a virtual version of NCCU's seasonal magazine utilizing Drupal.

### **CERTIFICATES**

- |                                                   |                                                  |
|---------------------------------------------------|--------------------------------------------------|
| ○ Software Development Fundamentals (Durham Tech) | ○ Java Developer (Durham Tech)                   |
| ○ Database Programming (Durham Tech)              | ○ MTA JavaScript (Microsoft)                     |
| ○ Microsoft Developer (Durham Tech)               | ○ CNC Machining 101 (AB Tech)                    |
| ○ IT Foundations (Durham Tech)                    | ○ Fusion 360: Design for Mechatronics (LinkedIn) |

### **SKILLS**

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| ○ Prototyping                      | ○ Siemens NX and Creo                |
| ○ Fusion 360 and SolidWorks        | ○ 3D Printing and Scanning           |
| ○ Manual Machining: Mill and Lathe | ○ MATLAB and Python                  |
| ○ Waterjet and Laser Cutter        | ○ CNC Machining: Mill, Lathe, Router |
| ○ MIG and TIG Welding              | ○ CNC Programming: CAM and G-Code    |
| ○ ESP32 and Arduino                | ○ HTML, CSS, and JavaScript          |
| ○ Soldering                        | ○ Adobe Photoshop and Premiere Pro   |
| ○ C, C++, C#, Java                 | ○ Microsoft Office                   |
| ○ Swift                            |                                      |

### **PROJECTS**

- [kwalibunker.com/stem-projects](https://kwalibunker.com/stem-projects)