# JEREMY E. BURKE

Jb605077@wne.edu Hooksett NH, 03106

2 Laurel Rd Hooksett NH, 03106 (603) 860-9590

## **EDUCATION:**

Western New England University, Springfield MA Bachelor of Science in Engineering, May 2026 Major: Computer Engineering GPA: 3.707

# **COURSEWORK:**

Linear Circuits I & II VHDL: Simulation and Synthesis

Computer Programming in C Data Structures & Embedded Firmware Design

Signals and Systems Intro to Digital Signal Processing

Honors MATLAB Electronic Circuits
Real Time Embedded Kernels Microprocessors I & II

#### **EXPERIENCE:**

# **Project Management Intern**

May 2023 – August 2024

Michels Power Inc., Pembroke, NH

- Worked with project managers on transmission and distribution projects in the Utility industry
- Made KMZ files on google earth for transmission line projects
- Created a Transmission lines database with over 2000 structures with longitude and latitude
- Used Dig Safe to call in mapping for projects
- In field experience surveying ongoing projects.

## **Embedded Tutor / TA**

**Spring 2024** 

- Teacher assistant for MATLAB computer programming class
- Helped students learn MATLAB coding language
- Helped professor in lectures
- Held weekly out of class review sessions

# Student Grader for Microprocessors I

**Electronic Controls Lab Assistant** 

Fall 2024 Fall 2024

# **COMPUTER SKILLS:**

## **AVR and Atmel Studio**

- Assembly Code
- Microprocessor Programming

#### Arduino

- Robot programming
- Algorithm learning

#### **LTspice**

- Circuit design
- Circuit testing

#### Visual Studio

- C programming
- Python

## **MATLAB**

- Graphing
- Equation calculations

## LabView

- Arduino Programming
- Algorithm testing

,

A CONTRICE.	
ACTIVITIES:  Freshman Ret Roch Pohet programming and designing	Dec. 2022
Freshman Bot Bash – Robot programming and designing	Dec. 2022
• Project leader in a group of 5 teammates	
• Placed 2 <sup>nd</sup> place out of 40 freshman teams	
• 1 <sup>st</sup> place for maze solving robot	
Coded micro-switch and ultraviolet sensors in Arduino	
using Adafruit Bluetooth micro-controller	M 2022
Freshman Smart Project – Product Design and Development	May 2023
Designed an air quality sensor	
Presented in front of local businesses	G . 2024
Sophomore Design Project – 3 band audio equalizer	Spring 2024
Simulated in LTspice	
Measured circuit on Analog Discovery Studio	
Jet Engine Controls Team	2024-Present
<ul> <li>Working with juniors and seniors</li> </ul>	
<ul> <li>Designing a control system for a 200lb thrust jet engine</li> </ul>	
<ul> <li>Sensor testing</li> </ul>	
<ul> <li>Learning PCB design and microcontroller C programming</li> </ul>	
Institute of Electrical and Electronics Engineers	2022-24
• Competed with a group of 3 in the Micro-Mouse competition at MIT	Oct. 2022
• Vice President	2024-Present
<ul> <li>Helped host Alumni Connection Event</li> </ul>	
<ul> <li>Went to HackUMass</li> </ul>	<b>Fall 2024</b>
<ul> <li>Hosting WNE Micro-Mouse Competition</li> </ul>	Spring 2025
WNE Rocketry Club	2023-Present
Founding member	
E-board Secretary	
Co-leader for the controls team	
Learning micro python	
DIII Collegiate level Golf	2022-Present