



CALEB SYLER

ELECTRICAL ENGINEER

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PROFESSIONAL SUMMARY

Highly motivated electrical engineering graduate with a strong foundation in Control Theory and Wireless Communication, eager to apply analytical and problem-solving skills to contribute to innovative projects, backed by relevant internship experience in research and development, utilizing programming including C and C++, prototyping, and manufacturing to deliver practical solutions.

ENGINEERING WORK EXPERIENCE

Summer Research Assistant

Mt. Vernon Nazarene University, Mount Vernon, OH
May 2022 to July 2022

- Researched subjects of near field communication (NFC) Technology and components including inertial measurement units (IMUs) and programmable microcontrollers
- Programmed using Keil IDE and STM32CUBE IDE, which both use C++ language
- Transferred raw data using NFC
- Used a low powered IMU to read off 6-axis motion
- Prepared a system to correlate the motion of the eyeball and brain to quantify data for concussions

Engineering Intern

DECA Manufacturing-Lexington, OH
May 2021 to August 2021

- Decipher schematics and diagrams of wire harnesses.
- Prototype a harness to IPC/WHMA A-620D standards from raw materials.
- Research manufacturer specifications for a part
- Use an ultrasonic welder for splicing wires
- Use a press and hand tools for crimping terminals on wires
- Utilize Microsoft Excel spreadsheets for statistical data input
- Help set up and program jobs for Schleuniger Crimp Center
- Delivered successful production sample of a Corvette harness

EDUCATION

Mount Vernon Nazarene
University Mt. Vernon, OH

Bachelor of Science, 2024

Major: Electrical Engineering

Minor: Mathematics and Physics

Accreditation: ABET

Coursework included Chemistry II, Analog Electronics, Digital Systems, Automatic Controls, Thermodynamics, Electromagnetic Theory, Optics, and Differential Equations.

KEY SKILLS

- AUTOCAD
- MATLAB
- PROGRAMMABLE LOGIC CONTROLLERS
- C/C++ (STM32Cube IDE and Keil uVision5)
- DRAFTING
- JavaScript (NetBeans IDE)
- Autodesk Inventor
- Autodesk EAGLE CAD
- LTSpice
- PASCO Capstone
- RESEARCH & DEVELOPMENT
- ASSEMBLY
- MATERIALS KNOWLEDGE

OTHER WORK EXPERIENCE

Kroger-Mount Vernon, OH **ClickList**

May 2022 to January 2023

Rural King-Mount Vernon, OH **Loader**

September 2020 to May 2021

Maintenance Crew Member **Spherion/Fed-X-Ashland, OH**

June 2019 to August 2019

Skills learned in these jobs include collaboration as part of a team, following a routine schedule, reporting data using Microsoft Excel, customer service and support, accurate measurement, and correct power tool usage.

ENGINEERING PROJECTS

- UAV with NIR Scanner for Agricultural Surveillance
- Embedded Concussion Sensor with integrated IMU and NFC
- Team Captain and Chief Programmer of VEX Robotics Team in High School

AWARDS

- FIRST TRUMPET, OPSICA BAND
- TRUMPET SCHOLARSHIP

OTHER INTERESTS

- Robotics
- Fluid Mechanics
- Heat Transfer
- Playing the trumpet
- Composing Music
- Continued Learning and Research

