AUSTIN GILBERT

1015 Henrietta St, Birmingham, MI 48009 (805) 444-4942
austin.1.gilbert@gm.com linkedin.com/in/austingilbert28/

Education

UNIVERSITY OF WASHINGTON **2017 – 2021**
Bachelor of Science, Electrical Engineering (BSEE) *3.60 Cumulative GPA*

- Dean's Scholar, Husky 100 Nominee, Purple & Gold Scholar
- *Relevant coursework: General Physics, General Chemistry, Math (Calculus, Differential Equations, Matrix Algebra, Statistics), Technical Writing, MATLAB, Java, Electrical Engineering (Circuit Theory, Linear Systems, RF/Microwaves, Devices, Power Systems, Embedded Systems, EE 499 Research)*

Relevant Experience

GENERAL MOTORS **Milford, MI**
Embedded Software Engineer (4th Rotation) *Feb 2023 – Present*

- Writing and flashing low-level embedded software onto the hardware I/O layer of an NXP S32N2 microcontroller as part of GM's newest software architecture using the SAFe development cycle
- Built a Python program to automate the creation of hardware I/O interface stubs by reading a text file of requirements and outputting commented and compiled C/Header stub files

Robotics Automation Software Engineer (3rd Rotation) *Aug 2022 – Feb 2023*

- Safety-certified, implemented, programmed, and documented a Kinova Link 6 robotic arm to automate infotainment-based validation testing on a Cadillac Celestiq test bench
- Developed a multithreaded Python application to activate robot programs in response to incoming test bench CAN messages while displaying communication status with a graphical-user-interface

Controls System Engineer (2nd Rotation) *Feb 2022 – Aug 2022*

- Compiled, tested, and released controller software for Active Safety and Advanced Driver Assistance Systems (ADAS) such as object and lane recognition using MATLAB Simulink and C
- Collected data in-vehicle from object fusion, lane map fusion, lane localization, and feature moding to automate vehicle lane, speed, and braking controls

Automation Process Engineer (1st Rotation) *Jul 2021 – Feb 2022*

- Developed and released a database-backed VCAM web application to centralize company-wide controller information and software packages, thus greatly improving the speed of data collaboration
- Built an application using C# to parse, organize, and upload years of data from multiple Excel-based Controller Development Plans to be used in the VCAM web application via a PostgreSQL Database

ADVANCED HYBRID VEHICLE LAB, EcoCAR Mobility Challenge **Seattle, WA**
Low Voltage Electronics Project Lead & Team Member *Sep 2018 – Mar 2021*

- Worked with 60 undergraduate engineers in the redesign of a 2019 Chevy Blazer to a hybrid-electric, autonomous car as part of a national competition sponsored by GM and the US Department of Energy
- Led a team of 5 in designing, documenting, pinning, and wiring all automotive power and CAN connections throughout the vehicle

Project Experience

PACCAR, University of Washington Senior Capstone **Kirkland, WA**
Project Lead *Jan 2021 – Jun 2021*

- Led two University of Washington undergraduates to create a close-range Vehicle-to-Vehicle update delivery platform for PACCAR's new fleet of trucks
- Designed a proof-of-concept mesh network using multiple Raspberry Pi development boards to automatically deliver updates from Pi-to-Pi in areas without an internet connection

Skills

- Programming experience with Python, C++, C#, C, Java, Kotlin, MATLAB, ARM Assembly, Git, Bash, and ADO
- Design and drafting experience with Simulink, VeSys, SPICE, Altium Designer, and Microsoft Suite