Brian Hill

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EDUCATION

George Mason University

Fairfax, VA

Expected December 2024

Computer Engineering, BS

• Notable Courses: Circuit Analysis I/II, Data Structures and Embedded Systems Programming, Continuous-Time Signals and Systems, Digital System Design, Differential Equations, Computer Organization, Embedded Systems

WORK EXPERIENCE

Software Developer

Reston, VA

CACI International Inc.

May 2023 - Present

- Modified and developed SQL scripts for conversion between government financial systems.
- Worked on Python-Selenium-based automated testing tool for Momentum based software.
- Utilized government-based Agile approach to efficiently iterate on given requirements.
- Received public trust clearance from VA. (Intern from 2023)

Managed Enterprise IT network and point of sales systems.

Sales Associate and Print Specialist

Manassas, VA

November 2020 - Present

- The UPS Store
 - Supervised high volume print jobs and designing methods to more efficiently sort and manage multiple enterprise grade printers.
 - Worked in national and international logistics for major retail package services.
 - Designed and printed customers personalized business advertisements.

PROJECTS

Keyboard Design

brianchill.us/#/Keyboard

- Designed Schematic, PCB, and external housing for external Manufacturing.
- Added functionality to existing firmware and documented changes/code on Github.
- Wrote bill of materials and chose cost effective components for design which were implemented into final product.

Microcontroller Powered Video on OLED Screens

brianchill.us/#/Oled

- Developed software interface to transmit video over serial.
- Used OpenCV to process video and compressed data for transmission and low-level playback.

Hardware-based Line Following Robot

brianchill.us/#/LineFollower

- Designed Opamp based platform to drive four motors Controlled by photoresistor-LED, transceiver-receiver design.
- Integrated low-budget off the shelf components into design to satisfy budget requirements.

TECHNICAL SKILLS

Languages: Python, C/C++, Java, PL/SQL, MATLAB, VHDL, JS/Web, Bash

Software/Packages: MS Office, Adobe CC, Fusion 360/Inventor, Xilinx Vivado, KiCAD/PSpice, Docker, Git, Jenkins, SQL Developer, Nginx/Apache, Node - ReactJS, OpenCV

Familiar Operating Systems: Windows, Arch Linux, Ubuntu, Raspberry Pi OS, Fedora, Proxmox, ESXi

Hardware Competencies: FPGAs, Microcontrollers, Elec. Testing Insts., Networking Devices

Awards & Certifications

IT Silver Medal | June 2020

GMU Tech Talent Awards | Multiple Years