

Blacksburg, VA

# Daniel Alexander

U.S. Citizen

(571) 762-9716  
dalex49@vt.edu

## Employment

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### **AI Research Intern** **Virginia Tech** **May 2024 - Jul 2024**

- Developed interactive game for children to create and guess other's drawings.
- Children will sketch a drawing which will be used to generate an image using AI. The images will be combined and the children will guess what the other person drew.
- Built program using HTML for sketching and ComfyUI (Python) with Stable Diffusion 3 for generating and combining images. Program was run on a server using Ubuntu.

### **Program Management Intern** **Micron Technology** **May 2022 - Aug 2022**

- Monitor and understand late activities on equipment installs in the fab cleanroom.
- Automated late activity tracking by using VBA and MySQL to replace previous method of manual extraction.
- Analyzed activity data to determine patterns and adjust for future projects.
- Collaborated with other departments to improve upon cleanroom efficiency.

### **Deskside Support Technician** **Hilton** **Jul 2019 - Mar 2021**

- Tasked with performing hardware and software support for accounts, applications, and equipment for all employees in the main corporate office as well as remote workers in our region.
- Worked on project deployment and troubleshooting to employees.
- Served as project lead for new hire equipment setup and account configuration.

## Education

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### **Blacksburg, VA** **Virginia Tech** **Expected Graduation May 2025**

- B.S. in Computer Engineering with Minor in Computer Science
- Notable Coursework:
  - ECE 2564 - Embedded Systems
  - ECE 3574 - Applied Software Design
  - ECE 4424 - Machine Learning

### **Manassas, VA** **Northern Virginia Community College** **Graduated May 2022**

- A.S. in Engineering

## Technical Experience

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### **Projects**

- **SCADA System for VSA.** Creating a Supervisory Control and Data Acquisition (SCADA) System for the Virginia Spaceport Authority to monitor sensors and equipment on their launchpads. System is being created using Ignition Software, data held in a PostgreSQL database, and virtual machines hosted on a Red Hat Enterprise Linux 9 server.
- **Hardware Reflex Measurement (C).** Project which utilized hardware timers and interrupts on a TI MSP432 microcontroller and launchpad to test reflex speed.
- **Tello Drone Project (C++).** Group project to parse Flight Plan Language (FPL) statements into tokens, identify the function of each token, and use manipulation functions to enter/remove them from a table. These tokens are then read and executed by the Tello Drone.

## Languages and Technologies

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- C++; C; Java; Python; MATLAB; Excel VBA
- Visual Studio; VS Code; Eclipse; Jupyter Notebook; Git; GitHub; Microsoft Office; Tableau