(848)-667-1161 andrew@viola.dev

Education

Intended B.S. Computer Engineering - Virginia Tech | Expected May 2025, Blacksburg, VA

➤ GPA: 3.56/4.0

Projects

Wii Play Tanks Neural Network Bot - Summer 2023

- Programmed and trained a custom environment to play Wii Play's Tanks minigame
- Python's OpenCV library for image recognition
- OpenAl's Gymnasium and Stable-Baselines3 for reinforcement learning algorithms

IR Radioteletype Transceiver - Spring 2023

- Created a system to send messages over 30 feet using an IR LED
- > Developed an Arduino program to convert and read custom messages into 8 bit binary
- Prototyped various filters to process an IR signal over 30 feet
- > Earned best in course

Experiences

Raytheon Technologies Fellowship Program Virginia Tech Hume Center | August 2023 - Present

- Attended a seminar course focusing on machine learning and cybersecurity
- Completed project-based curriculum
- Learn various topics to prepare for work in machine learning at Collins Aerospace

Undergraduate Teaching Assistant ECE Department at Virginia Tech | August 2023 - Present

- > Held office hours for 7 hours, helping students with their Sophomore design project
- Helped teach and reinforce Arduino C and filter design

Galipatia Leadership Team Center for the Enhancement of Engineering Diversity | August 2022 - Present

- Managed a committee of 9 sophomore students to train on makerspace tools
- Worked with other committees to foster a living learning community

Studio Technician inVenTs Studio at Virginia Tech | August 2022 - May 2023

- Created data collection techniques and structures to improve the makerspace
- Improved the space by fixing machinery and tools, while setting up new machines
- Worked with students to help create and realize their personal and education projects

Skills

CAD | Circuit Design | Verilog | Python | EAGLE | MATLAB | Linux | Docker | C++