

**Permanent Address**  
6385 Saxon Meadow Drive  
Leland, NC 28451

**Linkedin:**  
[www.linkedin.com/in/andrew-b-viola](https://www.linkedin.com/in/andrew-b-viola)

**Andrew Viola**  
(848)-667-1161  
[andrew@viola.dev](mailto:andrew@viola.dev)

**Current Address**  
1622 Patrick Henry Drive #238  
Blacksburg, VA 24060

**Portfolio:**  
[andrew.viola.dev](https://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
- OpenAI'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

**Sand Coffee Table** - May 2022

- Developed an XY gantry that moved a magnet around using 3D printing firmware
- Attached the gantry to a "sandbox" that held a metal ball, covered by a glass surface
- Giving the 3D printing firmware commands, the magnet would move the ball around, creating pictures in the sand

## Experiences

**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

**Leadership Team** *Center for the Enhancement of Engineering Diversity* | August 2023 - 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++