

Education

Virginia Tech, Blacksburg, VA  
Bachelor of Science: Computer Engineering primary focus Machine Learning  
3.5 GPA

August 2022 - May 2026

Technical Experience

- Virginia Tech, Blacksburg, VA  
Sudoku Solver
- January 2025 - Present
- Leading the design and implementation of an AI-driven Sudoku solver in Python, using backtracking and constraint-based algorithms
  - Coordinated with a teammate to integrate AI libraries and optimize logic, ensuring efficiency and scalability
- Virginia Tech, Blacksburg, VA  
Handwriting Classifier
- January 2025 - Present
- Leading the architectural design of a CNN model to accurately digitize handwritten text form scanned documents
  - Collaborating with two teammates to implement advanced deep learning techniques and optimize model performance for real-world applications
- Virginia Tech, Blacksburg, VA  
Home Audio System
- January 2024 - May 2024
- Designed and executed a three-band graphic equalizer and high-efficiency class-D amplifier, delivering precise audio control and dynamic visualization through a custom OLED spectrometer
  - Programmed a microcontroller (Arduino Uno) for PWM signal generation, overseeing hardware interfacing, signal processing, and user interface design through advanced prototyping and LTspice simulations

Core Competencies

- Technical: C++, C, PyTorch, Matlab, Python, Java, DC Circuit Analysis, Microsoft Office Suite (Word, PowerPoint, and Excel)

Activities & Volunteering

- Institute of Electrical Engineers: Virginia Tech Chapter  
Member
- February 2023 - Present
- Collaborated with peers and many engineering professors to facilitate both personal and professional growth
  - Engaged in a variety of technical workshops, dynamic discussions, and exclusive networking events, thereby enhancing expertise in current industry trends and emerging technologies
- Solar Car Design Team  
Telemetry Team Member
- September 2023 - May 2024
- Designed and implemented driver and pit crew user interfaces on a Raspberry Pi, utilizing various libraries and software tools for precise, real-time data visualization
  - Collaborated closely with data collection team to refine data acquisition methods, improving telemetry accuracy and system reliability

Work Experience

- Virginia Tech Dining Services, Blacksburg, VA  
Student Assistant Manager
- October 2023 - September 2024
- Managed daily operations of designated dining hall sections, ensuring efficient workflow and compliance with health standards. Delegated tasks among student workers, fostering a collaborative and productive work environment