

# Brian Muhic

Website: [brianmuhic.github.io](https://brianmuhic.github.io) | 609-922-6437 | [brianmuhic@vt.edu](mailto:brianmuhic@vt.edu) | 769 Bowman Lane, Moorestown, NJ 08057

## EDUCATION

### Virginia Tech, College of Engineering

*B.S Computer Science*

Blacksburg, VA

*Expected May 2026*

- Minors: Math and Cyber Security
- In-Major GPA: 4.0
- Fall 2022 Dean's List, Spring 2023 Dean's List
- Relevant Classes: Calculus 1, Calculus 2, Calculus 3, Discrete Math, Linear Algebra, Introduction to Software Design, Software Design and Data Structures, Computer Organization, Problem Solving in Computer Science, Foundations of Physics, and Foundations of Engineering

## TECHNICAL SKILLS

**Java, Python, C, JavaScript, Node.js, Git, Linux, SQL, MATLAB, PostgreSQL, Simulink, AWS, Apache Kafka, Artificial Intelligence, Machine Learning, Data Structures, Object-Oriented Programming, Software Testing**

## RELEVANT EXPERIENCE

### Hokie Electric Vehicle Team

*Propulsion and Controls and Modeling Team Member*

December 2022 – Present

*Virginia Tech*

- Working on optimizing a 2023 Cadillac LYRIQ over the next four years.
- Responsible for the controls of all longitudinal motion of the vehicle, including interfaces with automated features.
- Design and test the propulsion system for the electric vehicle challenge.

### Email Spam Detection

*Developer*

November 2023

*Blacksburg, VA*

- Created a machine learning algorithm that was trained on a data set of emails to determine whether an email is spam or not.

### Web Packet Tracer

*Developer*

December 2023

*Blacksburg, VA*

- Created a program that accepts a domain name as an input then traces the pathway taken by a packet from the source to the destination. The program uses Dazzlepod API to retrieve the latitude and longitude for each IP address of all the routers it pinged. Implemented error handling for invalid IPs and duplicate coordinates. The coordinates are plotted on a Google Map using gmplot and labeled to show the path taken.

## EMPLOYMENT

### Junior Developer

*Centrifuge*

May 2023 – August 2023

*Remote*

- Worked on building an image recognition system. The system included running an open source Artificial Intelligence model on an internet video camera, sending events from the model to cloud hosted microservices, and providing a User Interface to review the events.

### Web Developer

*TDAY Sports*

June 2023 – August 2023

*Remote*

- Created a dynamic website for a sports media company
- Utilized HTML, CSS, and JavaScript to create an engaging layout of images, articles, and videos.
- Utilized PHP in order to request and retrieve the viewers' email addresses to create an email subscription list to improve engagement.

## AWARDS AND ACCOMPLISHMENTS

### Moorestown High School Computer Science Graduation Award

June 2022

- An award that is voted on by the computer science department to reflect a student with exceptional achievement in the field of computer science.

### Double Category Award Winner at the HackDown Hackathon

November 2021

- Hosted by Kappa Theta Pi at The College of New Jersey.
- Best Space App powered by Space Force and Best Sustainability Hack.
- This project consisted of a multi-purpose environmental sensor system designed to maintain a dynamic equilibrium for confined environments and outer space utilizing an interactive website and sensors.