

# Thomas Billington

**Objective:** Obtain a software engineering summer internship position.

**GitHub:** <https://github.com/tombillo1>

**Website:** <https://tommybillington.com>

**Location:** Virginia // DC (willing to relocate)

**(571) 271-4677** [tommybillington@vt.edu](mailto:tommybillington@vt.edu)

## Skills

### Proficient:

**Python:** Keras, NumPy, OpenCV

**Linux:** Git, Bash

**R, Java, C, C++**

### Familiar:

**MATLAB, SQL, PowerBI**

**Web Dev:** HTML, CSS

## Relevant Coursework

Quantum Computing, Data Structures & Algs., Computer Organization, Data Analysis & Visualization

## Organizations

**Sigma Phi Delta** – Professional engineering fraternity – Director of Recruitment & Exec. Member

**Young Men's Service League** – Ashburn Chapter – Vice President & Founding member

## Projects

**StockAnalysis** – Market prediction model using a recurrent neural network.

**AnimeAI** – Recommendation ML model for animated shows using a KNN algorithm.

**RipeFruit** – Computer vision program used to help farmers track ripeness in product.

**PyWord** – Python program that assists users in playing the popular game, Wordle.

**Arduino Piano** – C++ push-button piano engineered to include octave shifting and an LCD display.

## Education

**Virginia Tech** – Blacksburg, VA

B.S. in Computer Science, Data-Centric Computing

Graduating May 2024

- GPA: 3.32
- Pursuing a focus in artificial intelligence and machine learning.

## Experience

**General Dynamics Information Technology** – Reston, VA

Software Developer Intern

June – August 2022

- Worked on the \$100 million ISEE contract with the Defense Intelligence Agency concerning software development in terms of infrastructure as well as identity, credential, and access management (ICAM).
- Collaborated with a sub-contracting company to automate the migration of thousands of over-seas email accounts. Wrote new PowerShell scripts as well as triaged bugs within the existing codebase to prioritize for execution.
- Configured ports and set specific network protocols on Cisco enterprise routers within a sensitive compartmented information facility.

**Hokie Electric Vehicle Team** – Blacksburg, VA

Software Engineering Researcher

Sept 2021 – Present

- Currently working on the Connected and Automated Vehicles Team for the EcoCar 4-year design competition with headline sponsors such as General Motors, MathWorks, and the United States Department of Energy.
- Responsible for creating and integrating sensor fusion algorithms for a 2023 Cadillac LYRIQ. Primarily working with MATLAB and Simulink to prototype a custom Lidar/Camera system for pedestrian detection.
- Completed independent research on the different subsystems for a hybrid-electric car that included propulsion controls, drivetrain components, and connected systems.