

# Michael Moorman

☎ (205) 332-7878

🐙 [GitHub Profile](#)

📍 Birmingham, AL

✉ [mmoorman@college.harvard.edu](mailto:mmoorman@college.harvard.edu)

🌐 [LinkedIn Profile](#)

## SKILLS AND OBJECTIVE

Harvard student pursuing a joint degree in mathematics and computer science, seeking an internship in Software Engineering. Strong and extensive background in math and computer science, encompassing class, internship, research, and extracurricular experience. Adept at problem-solving and learning quickly. Relevant key skills include:

**Hard Skills:** Python | C/C++ | Machine Learning (PyTorch) | SQL | Applied Mathematics | Data Structures and Algorithms | LaTeX

**Soft Skills:** Communication | Problem-Solving | Teamwork | Willingness to Learn

## EDUCATION

### Harvard College

2021-2025

Mathematics and Computer Science Joint, Language Citation in Spanish

GPA: 3.96/4.0

- Harvard University Machine Intelligence Community
- Harvard Open Data Project
- **Relevant Coursework:** Data Structures and Algorithms, Algorithms and their Limitations, Abstraction and Design in Computation, Real Analysis, Introduction to Probability, Linear Algebra, Multivariable Calculus

### Homewood High School

2017-2021

High School Diploma

GPA: 4.5/4.0

- Valedictorian
- Senior Class President
- National Merit Scholar

## RELEVANT EXPERIENCE

### Verizon

June 2023-Present

Software Engineering Intern

Remote

- Develop software for data analysis of billions of data points across hundreds of KPIs collected from Verizon's 5G network, including data visualization and machine learning.

### Radiance Technologies

May 2022 - August 2022

Simulation and Modeling Engineering Intern

Huntsville, AL

- Researched and implemented multiple reinforcement learning algorithms for command-and-control air defense systems, including neural networks for DQN implementation using PyTorch and TensorFlow.
- Responsible for 100% of machine learning code written for automated weapon-target assignment.
- Formulated and implemented all algorithms related to scenario simulation and reinforcement learning agent coupling.
- Obtained Secret Level Security Clearance.

### University of Alabama at Birmingham

July 2020 - Present

Student Mathematics Researcher

Birmingham, AL

- Research complex dynamics and combinatorics weekly with Dr. John C. Mayer, math professor at The University of Alabama at Birmingham, and two other students. Gather and analyze data produced by software of our creation, leading to conjectures and formulas. Discover patterns that lead to formulaic and algorithmic approaches to previously unsolved problems.
- Accepted to the 2023 American Mathematical Society Southeastern Conference for an oral presentation.

### Harvard University

August 2022 - December 2022

Introduction to Computer Science Course Assistant

Cambridge, MA

- Led and taught students style, design, and correctness in programming through office hours and tutorials.
- Graded these same criteria on the cumulative, semester-encompassing test.
- Supported the full-time staff through running course events, such as the CS50 Hackathon, Fair, and more.