

# Guteraa Ayana

763-355-4535 | guteraaa.ayana@gmail.com | linkedin.com/guteraa | github.com/guteraaayana

## Education

### Emory University

Expected May 2029

Bachelor of Science in Computer Science

Atlanta, Georgia

- **Relevant Coursework:** Introduction to CS I & II (Java), Selected Programming Languages (HTML + JS), Introduction to Statistical Computing I & II (R + Python)

## Experience

### Emory University

Feb 2026 – Current

Mathematics Tutor

Atlanta, Georgia

- Tutor 4th grade mathematics through Emory Reads, a service provided by Emory University to elementary-middle schools.
- Connects college students with younger kids to assist in developing reading and math skills.

### Northeastern University

Aug 2024 – Oct 2025

Research Assistant Intern

Remote

- Conducted advanced statistical research in soccer analytics, focusing on performance trends, tactical insights, and predictive regression modeling.
- Built reproducible data pipelines using Python and SLURM for large-scale analysis, and applied libraries such as Pandas, NumPy, and Matplotlib for data processing and visualization.
- Results contributed to a publishable research paper on actionable analytic methodologies in sport performance.

### Presbyterian Homes and Services

May 2023 – Aug 2025

Server

Arden Hills, Minnesota

- Prepared and organized memory-care dining room to ensure a smooth dining experience for residents.
- Managed and processed resident meal orders in both cafeteria and room service settings.
- Plated meals, maintained a clean dining environment, and provided efficient meal delivery for residents.
- Setup for breakfast the next day by washing dishes, cleaning facilities, and prepping the dining room.

## Projects

### Personal Portfolio Website | HTML, JavaScript, CSS

- Designed website for my personal portfolio using HTML to familiarize myself with CSS and JavaScript.
- Started as simple class project then expanded into personal driven project.
- Website Link: <https://guteraaayana.github.io/GuteraaAyana/>

### Soccer Analytics Research | Python, Matplotlib, Numpy, Pandas

- Analyzed 3,433 professional soccer matches to identify temporal goal-scoring patterns through statistical regression modeling, publishing findings as arXiv pre-print.
- Discovered that goal-scoring probability increases as matches progress, with significantly fewer goals than expected in the early minutes of each half ( $\chi^2 \approx 288.62, p = 3.72 \times 10^{-21}$ ).
- Identified “bursty” goal-scoring behavior where teams are more likely to score consecutive goals shortly after their previous goal, revealing temporal clustering patterns that deviate from random expectation.

## Technical Skills

Languages: Python, Java, JavaScript, CSS, HTML, R

Technologies: Matplotlib, Pandas, Numpy, Git

## Additional Skills and Interests

Hobbies: Fencing, Biking, Boxing, Reading

Interests: Programming, Video-games, Exercising