



*University of Maryland, Baltimore County*

expected graduation: 2028

Intended major: Computer Science w/ Machine Learning concentration

*Relevant Courses:*

- Discrete Structures, Data Structures, Multivariable Calculus, Intro to Diff Eq

*INTERNSHIPS:*

*Software Engineering Fellow – HeadStarter*

July - Sept, 2024

- Worked with a team of upperclassmen to build and scale multiple react and next.js apps
- Learned React, Next, Node, Python, JavaScript, REST APIs and Firebase

*Research Assistant – Professor Tom Goldstein – UMD*

June - November, 2023

- Wrote script in python to process YouTube's 8M dataset for training data for Novel View Synthesis Diffusion Models - Python
- Primarily performed data analysis on JSON files for verification of pre-processing script's output - Python

*Research Assistant – Professor Iosef Vaisman – GMU*

June - November, 2023

- Programming software for a novel method of 3d protein visualization using polygonal rendering of objects
- Software created from popular and existing PyHull and JMol programs

*PERSONAL PROJECTS:*

- ERBuilder - Downloadable application that optimizes a user's Elden Ring build using a fine-tuned GPT 4o model. Originally a web app hosted with firebase, now a dockerized react app that has been deployed locally with Kubernetes - React, JS, CSS, HTML, Docker, Kubernetes, REST APIs
- ER Gameplay Analyzer - Elden Ring specific, video classification model for advice on gameplay
  - Will be built into ERBuilder as a SaaS application for gameplay analysis and advisor, placed behind a paywall using Stripe API to minimize the costs of cloud services for storage, training, and deploying - React, Python, HuggingFace, AWS S3, AWS SageMaker

*Clubs:*

- Hack UMBC

*Tech Stack:*

- Languages: Java, Python, JavaScript, SQL, C++
- Frameworks: Node, Next, Clerk, Tensorflow, Keras
- Libraries: React, Clerk, NumPy, Pandas, PyTorch
- Technologies: Node.js, HTML, CSS, REST APIs, Hugging Face
- Developer Tools: Git, Anaconda, Docker, Kubernetes, AWS (EC2, SageMaker, S3), Firebase, VS Code, Eclipse
- Platforms: Windows, Ubuntu, Slack

*SOFT SKILLS*

- Planning project pipelines from start to finish including cost estimation reports with daily modifications
- Planning, building, and deploying finished applications in 36 > hour sprints for team hackathons