

Dagm Henok

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EDUCATION

University of Maryland - College Park
Bachelor of Science in Computer Science and Math

May 2026
GPA: 3.9

TECHNICAL SKILLS

Languages: Python, Java, Typescript, C, SQL, JavaScript, HTML, CSS, Matlab, R, OCaml, Rust
Frameworks: React, React Native, Next.js, Flask, JUnit
Technologies: Git, Linux, AWS, Azure, Supabase, Firebase, Docker, Apache Kafka, Redis, Kubernetes

WORK EXPERIENCE

AI/ML Intern

Hampton, Virginia

NASA

Oct 2025 - Present

- Architecting an **NLP** pipeline using a **RAG** system to align scientific educational content with specific Science Standards, enabling educators nationwide.
- Utilizing advanced prompt engineering methodologies to ensure LLM-generated suggestions are aligned with federal educational standards and devoid of hallucinations.

Co-founder & Chief Technology Officer

Remote

Tailored: Shopping for Clothes

May 2024 - Present

- Launched a **React Native** and **Typescript** app that employs a “swipe right” mechanism for buying clothing, garnering **400+** downloads on the App Store, and securing over **\$15K** in prize money.
- Constructed a Web Scraper using Selenium that has scraped over **1,000,000** clothing items, gathering information like images before storing it in a **Supabase** database
- Developed an **ML Recommendation System** that uses user interactions to create a user vector in a latent space of embedded images to tailor each user’s feed
- Devised a **REST API** to manage data and serve items, suggested recommendations, and deployed it using **AWS** Lambda and API Gateway

Prompt Engineering Intern

Remote

Outlier AI

May 2024 - Aug 2025

- Enhanced large language model outputs by designing and optimizing high-quality prompts, contributing to a **10%** increase in model accuracy
- Wrote complex **SQL** prompts modeling real-world enterprise databases to systematically test an AI model’s robustness against hallucinations for deployment.
- Implemented mitigation strategies to reduce model bias, which resulted in a **30%** increase in user satisfaction score

Software Engineering Intern

Remote

Reality AI Lab

May 2024 - Aug 2024

- Engineered an engaging, gamified user interface for a personalized AI tutor in React, directly integrating a multi-layered AI engine (**LangChain**, **OpenAI**) to serve adaptive content.
- Created a serverless backend using **Firebase** to manage user authentication and ensure real-time data persistence.
- Collaborated in a team to build and deploy the full-stack AI application on **Azure**, contributing to both client-side and server-side development cycles.

PROJECTS

AI Tennis Analyzer | *Python, PyTorch, YOLO, OpenCV*

April 2024

- Fine-tuned a YOLO object detection model to track players and the ball, training a separate PyTorch model to project their coordinates onto a 2D top-down mini-map for real-time visualization.
- Engineered a live analytics system to calculate player speed and ball velocity, and built a custom scoring model that detects out-of-bounds trajectory.

LockedOut | *Next.js, Typescript, Tailwind, Python, SQL, Manifest V3*

April 2025

- Designed and architected a digital wellness platform with an API-driven blocking engine that automatically restricts sites based on pending assignments from Gradescope and Canvas.
- Implemented the user-facing components, including a companion browser extension for focus controls and a secure magic-link login system for persistent session management.