

Yonathan Wagaye

EDUCATION

Abu Dhabi, UAE **New York University Abu Dhabi** *Aug 2021 - May 2025*

- **Major:** Computer Science, BSc
- **Minor:** Applied Mathematics
- **Course Work:** *Data Structures, Algorithms, Software Engineering, Applied Internet Technologies*, Computer Vision, *Applied Machine Learning*, Introduction to Game Development in Unity, Operating Systems

EMPLOYMENT

Web Developer, Data Analyst [EasyEyes Research Team](#) **Oct 2024 - Present**

Project: Conducting vision experiments using real-time web applications

- Developing interactive web applications for vision experiments using **JavaScript, Express, Node.js**, and **React** to support research objectives and enhance user interaction.
- Conducting in-depth data analysis with **R** to extract actionable insights and generate plots

Full Stack Engineer, Intern **Al Fahad Trading Enterprises L.L.C** *Aug 2024 - Dec 2024*

UniMentor (startup): A web app that connects tutors with students in the UAE

- Developing a full backend system utilizing **Node.js** and **Express.js** to create secure and scalable endpoints for data flow between the front and backend.
- Used **Postgres** for efficient data storage, optimizing query performance, and managing complex user-session relationships.
- Utilized **Redux** for state management to streamline tutor-student interactions on the front end.

Web Developer, Research Assistant [Applied Interactive Multimedia Lab](#) **Feb 2024 - Dec 2024**

Project: Harnessing the capabilities of social robots to identify individuals with ADHD

- Developed web-based experiments using **React** to create dynamic, responsive interfaces for collecting data on attention patterns.
- Integrated communication between a **QT robot** and the web app by sending requests through a **JavaScript API**, enabling real-time interactions and responses between the robot and the system.

PROJECTS

AI Medical Assistant – Symptom Analysis & Triage System

Tech Stack: Next.js, FastAPI, PostgreSQL (pgvector), OpenAI GPT-4o-mini

- Built an AI-powered medical assistant using vector search and LLM-based reasoning to analyze symptoms and generate structured responses
- Implemented end-to-end architecture with embedding-based retrieval (pgvector) and FastAPI backend for reliable and scalable API performance

Unpolished - Authentic Social Networking Platform

Tech Stack: React Native, Expo Router, Supabase, PostgreSQL, AsyncStorage

- Building a mobile social networking platform focused on fostering authentic, real-world connections through spontaneous content sharing and meaningful user interactions.
- Developing a cross-platform application with React Native and Expo Router, implementing scalable navigation, authentication flows, protected routes, and responsive platform-specific user experiences across iOS and Android.

DevTrack - Developer Task & GitHub Activity Manager

Tech Stack: React, Node.js, PostgreSQL

- Built a full-stack developer productivity platform to manage tasks and track GitHub activity, including custom backend APIs and dynamic UI components
- Integrated GitHub data and designed a structured PostgreSQL database to enable real-time task tracking and scalable data handling

SKILL

Typescript, React Native, Next.js, Redux, Postgres, FastAPI, Node.js, Express.js,