

MOSTAFA HANY

Software Engineer

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Portfolio | **Linkedin** | **GitHub**

EXPERIENCE

Unify AI | Software Engineer

Remote | October / 2022 - January / 2024

- Led the testing team.
- Refactored the testing framework to enhance modularity and readability, achieving a 50% reduction in code size.
- Implemented functionality to support multiple instances of the framework, reducing the average test runtime from 120 seconds to 10 seconds.
- Conducted over 30 technical interviews.

Unify AI | Software Engineer Intern

Remote | August / 2022 - October / 2022

- Implemented over 50 core functions in Ivy framework for various backends like Tensorflow, PyTorch and NumPy.
- Implemented fuzzy float number generation for the testing framework.

PUBLICATIONS

Accelerating Deep Learning using Ivy | [Link](#)

NeurIPS, 2023

Co-authors: Guillermo Sanchez-Brizuela, Ved Patwardhan, Matthew Barrett, Paul Anderson, **Mostafa Hany**, Daniel Lenton.

RELATED SKILLS

Programming Languages: C++, C, GLSL, Python, Lua, Bash
Libraries / Frameworks: OpenGL, ImGUI, Assimp, GLFW, SDL
Tools / Platforms: RenderDoc, CMake, Premake, Docker, Git, Neovim

EDUCATION

Faculty of Computers & Artificial Intelligence - Cairo University

Giza, Egypt

Artificial Intelligence Bachelor's

August 2018 - August 2024

PERSONAL PROJECTS / OPEN-SOURCE

3D Renderer (Aker) | [Link](#)

C++, OpenGL, ImGui, Assimp, SDL, CMake

Cross-platform 3D renderer with OpenGL. Supports lighting, shadows, and model loading. Full scene editor with ImGUI.

Software Raytracer | [Link](#)

C++, Lua C API, STB, Premake

Cross-platform software raytracer from scratch in C++. Supports lighting, shadows and reflections. Embedded Lua C API for scene configuration using Lua file.

CS:GO Object Detection | [Link](#)

Python, YoloV5, OpenCV

Detecting CS:GO objects using YOLOv5 with a custom OpenCV annotation script.

The Office (Game) | [Link](#)

C#, Unity

Brackey's Game Jam 2021 submission. Built with Unity in 6 days.

BingoBango (Game) | [Link](#)

C#, Unity, Steamworks SDK

Platformer game published on Steam. Utilized Steamworks SDK for Steam Achievements, Leaderboards, and publishing.

CERTIFICATIONS

- Fundamentals of Deep Learning workshop - NVIDIA DLI
- Machine Learning Cross-Skilling Nanodegree Program - Udacity