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Links

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About Me

Looking for an entry level job in the software development industry, With a particular interest in 3D computer graphics (E.g. render engines, ray tracers...), and Image Processing. Mainly using C or C++, I'm open to learn new languages , techs, and tools.

Skills

LANGUAGES
C/C++

OS
GNU/Linux

OTHERS
Pthreads, Intel Intrinsics, GCC
image processing , OpenGL ,
GNU Make,Markdown, Git,
L^AT_EX.

Education

2016-2021
CAIRO UNIVERSITY
Biomedical Engineering
Very Good

Projects

2022 Ray Tracer

[Repo](#)

Built a ray tracer from first principles using no external libraries other than the one that will take the final pixel data and save it on disk in a PNG format.

C++

2021 small image processing library

[Repo](#)

Optimized mini-img-processing library implemented from scratch using C, Pthreads, And Intel-intrinsics.

C

2021 Neural Model Optimization Tool

[Repo](#)

An automated optimization tool to help save time and resources in calibrating neural computational models to experimental measurements

Python

2020 16-Bit von neumann architecture Assembler

[Repo](#)

Trasnlates from Hack's assembly instuctions to hack's 16-bit Machine language

Python

2020 JPEG decoding Stepper

[Repo](#)

Shows the different stages of Decoding JPEG Files

Python

[More Projects](#)

Certificates and MOOCS

2020-NOW Machine Learning

[Certificate](#)

Machine Learning Basics (Supervised/Unsupervised learning - Neural Networks ...)

2020-NOW Programming Languages part B

[Certificate](#)

Introduction to the basic concepts of programming languages, with a strong emphasis on functional programming using Racket (Dynamic type system language).

2020-NOW Programming Languages part C

[Certificate](#)

Introduction to the basic concepts of programming languages, with a strong emphasis on OOP programming using Ruby (Dynamic type system language).

2020-NOW Build a Modern Computer from First Principles - Part 1

[Certificate](#)

Build a modern computer system, from the ground up from constructing elementary logic gates all the way through creating a fully functioning general purpose computer).

[More MOOCS](#)