

Robert MacWha

ML Developer



I am a 17-year-old AI developer and robotics enthusiast. I'm really fascinated by how AI can be used to expand different industries like Nanotech, Robotics, QC and BCIs. My goal is to build a world where all industries are automated by technology and humanity is free to pursue their passions.

Skills

Project Management
Graphic Design
HTML & CSS
JavaScript
Python
Keras
Java
C++
C#

Interests

Frontend Development
Procedural Generation
Game Development
Rendering Engines
Machine Learning
Blockchain

CONTACT

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Robert MacWha

EXPERIENCE

UNITED NATIONS CONSULTATION

A proposal created and presented to the United Nations on improving the quality of life for textile workers in Dhaka, Bangladesh. We planned to partner with Daraz, a subsidiary of Alibaba, and with the UN to provide online storefronts for small scale entrepreneurs.

[Slide Deck](#)

PROJECT: ZEPHER

Project Zepher is a moonshot company created to tackle the problem of climate change by embedding concrete with biosafe CO2-absorbing bacteria. We expected to be able to significantly reduce the environmental impact of construction with our technologies.

[Website](#)[One-pager](#)[Article](#)

BENCHSCI CONSULTATION

A proposal for Benchsci on decreasing drug development costs by 4.2% through increasing human diversity in early stage remote clinical trials.

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PROJECTS

PROJECT: AURRAS

Project: Aurras a natural language processing framework developed as a base for future projects. Aurras can be easily re-trained to perform intent classification and entity extraction for arbitrary applications and is built with Keras and the pre-trained DISTILBERT model.

[Repository](#)[Article](#)[Article](#)

PONGAI GAMEGAN

PongAI is an implementation of Nvidia's [GameGAN](#) paper. PongAI uses a dual-model LSTM/Autoencoder structure to process inputs, calculate physics, and render frames modeling the game Pong.

[Repository](#)[Video](#)

RAY MARCHING RENDERER

A ray marching rendering engine I created in both C++/OpenGL and Unity. This ray marching engine was written in relatively low-level code and served as an introduction to using C++ in large-scale projects.

[Repository](#)

MISCELLANEOUS PROJECTS

A collection of documented miscellaneous projects I have created over the years which demonstrates my wide range of abilities and skills.

[Repository](#)

EDUCATION

COLONEL BY SECONDARY SCHOOL / INTERNATIONAL BACCALAUREATE

2018-2022, Honor roll

THE KNOWLEDGE SOCIETY (TKS)

2020-2022