Lloyd Acquaye THOMPSON

MSc. | Machine Learning | Robotics

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♀ Kigali, Rwanda i | Ghanaian Citizen



I am optimistic about the applications of Machine Learning, Computer Vision, Robotics in solving real-life problems. I have relevant experience and continue to work tirelessly to enrich my skills. I am on a scholarship from Facebook and Google for the African Masters in Machine Intelligence Program, and I believe in perseverance and making use of opportunities. I am resilient, self-motivated, and able to adapt to new and challenging environments at any point in time.



PROFESSIONAL EXPERIENCE

Mint Innovations | Lead, Technical and Strategic Development for Artificial Intelligence Education, Accra, Ghana

2015 - 2018

- > Involved in designing and implementing robotics course modules on A.I Pattern Recognition and Image Processing using SpyBot
- > Training Students on needed skills for project work, example includes; programming Ultra-Sonic Sensors, Light Sensors, Speed-Monitoring System and the usage of Micro-controllers.

Arduino Raspberry Pi ScrapBotTV Lego Robot E-Z Robot

Technology Research and Innovation Center (TRIC) | Research Assistant, FUNDED BY MESTI-COTVET, Accra - Ghana

2014 - 2015

- > Developed an Incident Reporting System, which was intended for the Ghana Police Service and the Ghana National Fire Service
- > Created a Mobile App version for citizens to report road accidents by taking photos with their smart-

Andriod iOS Mobile App Eclipse Accident Reporting System

May 2015

November 2013

Mint Innovations, Tutor, Accra, Ghana

- > Teaching how to design and build electronic circuits through the usage of breadboards, LED's, push buttons and servo-motors
- > Assembling and Programming Lego Robots

Legos LegoMindStorm EV3 STEM EDu

September 2014 September 2013

Ghana Technology University College (GTUC) | Teaching Assistant, ACCRA - GHANA,

- > Laboratory Assistant for C++, HTML and Python
- > Supporting students on research projects and thesis documentation

Linux Microsoft Office SQL HTML Python



MSc. African Masters for Machine Intelligence (African Institute of Mathematical Sciences, Rwanda)

2009 - 2013 BSc. Information Technology, Ghana Technology University College, Accra, Ghana

2006 - 2007 Advanced Certificate in Information Technology, NIIT, Ghana

💋 Publication/Media

- Fast Development of ASR in African Languages using Self Supervised Speech Representation Learning: 2021 https://arxiv.org/abs/2103.08993
- 2015 Aljazeera, Innovate Africa: https://www.youtube.com/watch?v=AZEN_JqTYdk
- 2013 ScrapBot TV

SKILLS

Programming Python, Pytorch C++ and Deep Learning Related Frameworks and Packages, PDDL, Arduino,

Raspberry-Pi, NXC, mBlock

Database MySQL, PostgreSQL

Tools MS Office Suite, Google Suite, Latex, Git Operation System Linux, Windows, Mac-OS, iOS, Android

Others LegoMindStorms, E-Z Robot

</> </>> Languages

English • • • • • French • • • • • •

+ Forces

- > Resilient
- > Self Motivated
- > Able to work under pressure
- > Goal Oriented

HONORS AND AWARDS

2019 Full Scholarship from Facebook and Google: MSc. Machine Intelligence

2013 First Class Honors, BSc. Information Technology, Ghana Technology University College

July 2013 University of Health and Allied Sciences, Ho, Ghana (Resilient Africa Network, Seminar)

2007 Outstanding Student Award, Advanced Certificate in Information Technology, NIIT Ghana

PROJECTS

Unsupervised Keypoint Representation, Dynamics Modeling and Control

Currently

Maters Project, Supervised by Dinesh Jayaraman, University of Pennsylvania-USA

I am working on getting a faster keypoint representation from videos to predict their future positions and then control the movements through visual-servoing

Pytorch Computer Vision Machine Learning Robotics

AN INTELLIGENT LEGO ROBOT TO SORT MARBLES USING COLOR RECOGNITION

2013

Undergraduate Project

I assembled and programmed a Lego Color Sorter that is able to identify and sort different colored pebbles, and place them in the respective trays, this is a symbolic representation of how possible it is for A.I to sort cocoa beans.

C++ Lego NXC CodeBlocks

LEGO RUBIKS CUBE SOLVER 2014

DIY Project

This project was to solve the famous Rubik's Cube using a Lego robot, the idea tested how algorithms can be translated to workable programming source-code.

C C++ Arduino Raspberry Pi

CUTREACH AND VOLUNTEERING

2016/2019 Humanist Association of Ghana: Organizing Secretary, (Promoting Science and critical thinking in Primary, Secondary and Tertiary level through the Freethinking Campus project and the Book-Drive donation)

2013 - 2015 Free Campus Micro-controller Training Program: Initiated the free campus workshop for students to learn how to program and build prototype projects. A few of the projects we worked on are Obstacle Avoiding Robot, Weather Monitoring Station, Arduino for Speech Recognition and Autonomous Lane Keeping Car with Raspberry Pi and Legos

2012 Metro Institute of Innovation and Technology: Had the opportunity to introduce a group of young graduates from Orphanage Africa to computers, i.e. MS Office Suite, Intro to the Internet, Google Apps etc

66 REFERENCES

Moustapha Cisse, Ph.D

Facebook A.I, (FAIR)

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Angela Tabiri, Ph.D

AIMS-Google AI, AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES

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