



Date: 29<sup>th</sup> November 2024

### **TO WHOM IT MAY CONCERN**

This is to state that **Mohamad Ruzni** Student Admission Number: (MTI-SN0268/RAI-002/CR-038) has successfully completed the course **Artificial Intelligence and Robotics** at our institution.

The course contents are as follows:

#### **Mobile Application Development without Coding**

- Introduction To MIT App Inventor
- How To Use Palette and Components
- Designing The App Layout Structure
- Developed The Code by Using Block Programming
- Install the Developed App to an Android Mobile by using AI Companion or Emulator

#### **Robotic Simulation**

- What Is Simulation
- Introduction to Vexvr
- Designing the Drawing Robot
- Developed the Robot by Using Block Programming
- Testing the Robot

#### **IOT (Internet of Things) Smart Technology**

- Fundamental of Electronic
- Introduction to Arduino (Functions and Programming)
- Smoke Detection with Fire Alarm Project in Arduino
- Moving Object Detection Project with Ultrasonic Sensor in Arduino
- Complete Smart Home Project in Arduino

#### **Making Obstacle Avoiding Handmade Robot by Using Arduino**

- Functions of Every Equipment
- Understanding the Diagram of the Robot
- Build the Obstacle Avoiding Robot
- Programming to the Robot
- Testing and Debugging the Obstacle Avoiding Robot

#### **Introduction to Artificial Intelligence**

- What is Artificial Intelligence
- AI Simulation with Teachable Machine Project
- Understanding of Machine Learning and Data Science with Teachable Machine
- Installing and Configuring Python IDLE and Python Libraries
- Starting with Mini AI Projects  
(Change Image Format Project, Change Image Color Project, Resize Image Project, Image Gaussian Blur Project, Threshold Image Project, Threshold Image Project, Video Streaming Project)
- Moving Object Detection AI Project
- Face Detection AI Project
- Object Tracking Based on Color AI Project
- Face Recognize AI Project

We wish success in all future endeavors....!

Thank you.

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M.I.M.Ramseen  
Managing Director