

ABOUT ME

Specialized in software programming with over 4 years of experience in machine vision system development and aiming to improve knowledge and contribute to the software development in a wide field of study by mastering many programming languages. I have graduated from AWS Re/Start program from 4th batch and recently passed the Cloud Practitioner exam (CLF-02) in last November 2023. Currently adding more knowledge in cloud skills such as Terraform, Jenkins and Docker.



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ADDRESS

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PERSONAL SKILLS

Communication:

Management:

Teamwork:

Adaptability:

Problem solving:

AHMAD UMAER MOHAMAD

SOFTWARE ENGINEER



WORK EXPERIENCE

QA ENGINEER INTERN

June 2018 -August 2018

PROJECT ENGINEER

December 2019 -Present

SONY EMCS (MALAYSIA) SDN BHD

Inspecting on the TV products samples from the production line to make sure that the products are meeting the standards. The inspection includes few major tests to evaluate the quality and durability of each product.

CONTROL EASY TECHNOLOGY

3 years of experience on developing project especially machine vision system. Writing codes for the machine vision system mostly using the .NET framework (VB.NET & C#), the database & AI Projects involved related to inspection on the defect of a production and checking measurements using Matrox Imaging Library, control the flow of data either using the SQL or Excel Macros.

FREELANCE

March 2022-June 2023

WEB BASED AND PHONE APPLICATION

Developing custom web-based application mainly for static website. Also involved in phone application development using Flutter and Firebase database.



EDUCATION

BACHELOR OF ELECTRICAL ENGINEERING

2013-2019

MULTIMEDIA UNIVERSITY

Major: Electrical

AWS RE/START PROGRAM

2023

AWS RE/START PROGRAM

Cloud Practitioner Course

PROGRAMMING LANGUAGE

- C++
- C#
- VB.NET
- JavaScript
- Python
- CSS
- HTML
- SQL
- jQuery
- React.js

PROFESSIONAL SKILLS

- PROGRAMMING
- REPORT WRITING
- MS OFFICE
- ELECRTICAL WIRING
- ELECTRICAL DESIGN



CURRENTY LEARNING

- Terraform
- Docker
- Jenkins
- AWS Console



SCAN FOR WEBSITE

PROJECT DETAILS

MOTOR PARTS COUNTING SYSTEM

TOOLS USED:

- Matrox Design Assistant
- Excel Macros

PLATE CLASSIFICATION USING AI & PATTERN MATCHING

TOOLS USED:

- C# Programming
- Matrox Imaging Library
- Visual Studio 2019 as IDE
- PLC Programming

SIMULATION OF WAREHOUSE MANAGEMENT SYSTEM FOR UNIVERSITY

TOOLS USED:

- VB.NFT
- ACCESS DATABASE
- SQL
- Visual Studio 2019 as IDE

SMART BIN APPLICATION USING FLUTTER AND FIREBASE

TOOLS USED:

- Flutter
- Dart
- Firebase Database

- Setup a vision system consists of a vision camera, sensors, lighting, and a chamber.
- Detecting motor parts on the hanger and filtering out the hanger to count the exact number of the motor parts detected using blob analysis function.
- Saving the counted parts as an image and data in the CSV file to automatically extracting the data in the Excel.
- Design the Excel to save as a current date and clear the CSV data upon saving it using trigger buttons.
- Setup a vision system consists of a vision camera, sensors, lighting, robotic pickup arm, and a glass panel.
- Using C# to program the software in Windows 10 with the help of Matrox Imaging Library. Program designed to run in a loop until the trigger is given to stop, pause, or stop the program from running.
- Training an FCNET Matrox Training Context to be used to classify different plate based on the printing on the plate.
- Sending and receiving the inputs and outputs in the C# program to communicate to PLC and control the flow of the program.
- Create an Access Database to simulate the production materials, products, vendors, product stocks, and customers data.
- Create a linkage between all the databases.
- Linking the VB.NET program to the Access database
- Simulate the warehouse management system for the customer order, inventory, purchase order, manufacturing, and invoice.
- Accessing the Access database using the SQL to create, read, update, and delete the data.
- Create a program for the smart bin application that control the flow of the cleanup system using smartphones.
- Create a Firebase database that contain the bin information and the controlled variable of the bin to control the lid and status of each bin.
- Create a linkage to the google map to locate each of the bin.
- Design a UI for public and admin user with different functionalities.
- Create an authentication process using email as authentication method.