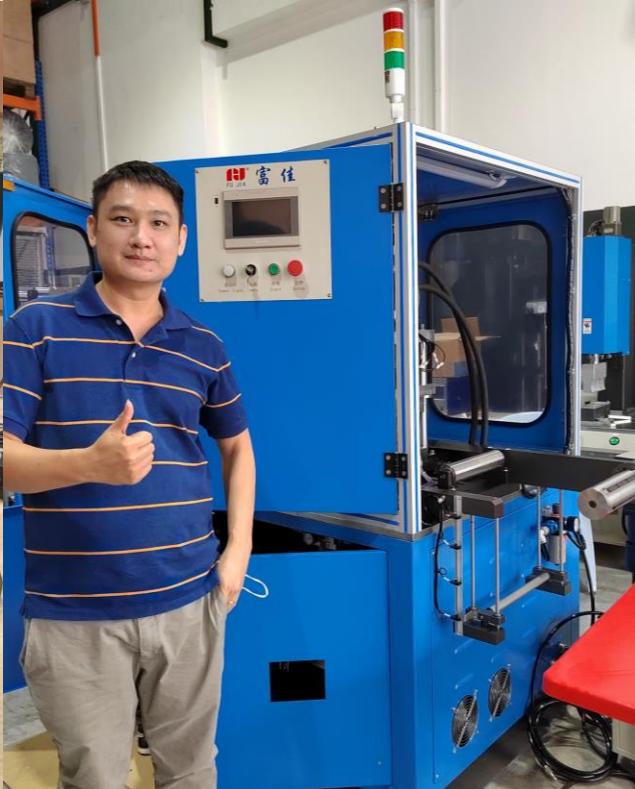




FORTUNE MACHINE COMPUTER

(JM0918121-D)

产学合作以及如何
应用开源软件达到
工业4.0



INTRODUCTION

- Fortune Machine Computer since 2019 formerly known as Fortune Computer Repair 2011 by Chong Yoe Yat. Provided Managing Information System solution and System Integration Services and Standard Products

MANAGING INFORMATION SYSTEMS

- VSE (Dyson V6) X196 Battery Pack Assembly Process Control System 2013 & 2015
- M-Fischer Tech Sdn Bhd Production quality control system 2015
- VS (Dyson Airwrap) X308 Airwrap Asseembly Manufacturing Execution System 2018
- Rui Sin Plastic Sdn Bhd Internet of things Production Realtime Monitoring 2020

AUTOMATION SYSTEM INTEGRATION

- Meiban Fortune Machine Computer Vision System Version 2 2019
- Flex Ltd Fortune Machine Computer Vision System Version 2 2020 & 2021
- Rui Sin Plastic Vision System Version 2 2020 & 2021
- Flex Ltd Deep Learning Inspection System 2022
- BMP Ultrasonic Welding Inspection and Alignment System 2021 & 2022
- VS Product cosmetic Deep Learning inspection System 2022
- Kaifa Deep Learning Soldering Quality Inspection System 2022
- Panasonic Vision System Version 2 and Deep Learning Inspection System 2019 to 2022
- Sanwa Jakatar Indonesia Transformer Inspection System 2024
- Filed two system related patents on 2023

TIMELINE



1993 Having first computer

2013 Managing Information System
for Manufacturing

2022 Open Source Platform

486Dx2

Computer Shop

I.T. System

Industrial 4.0

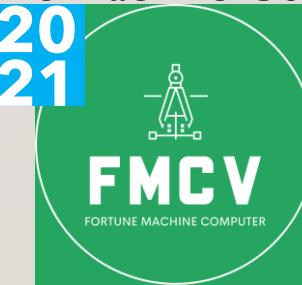
Open Source

2011



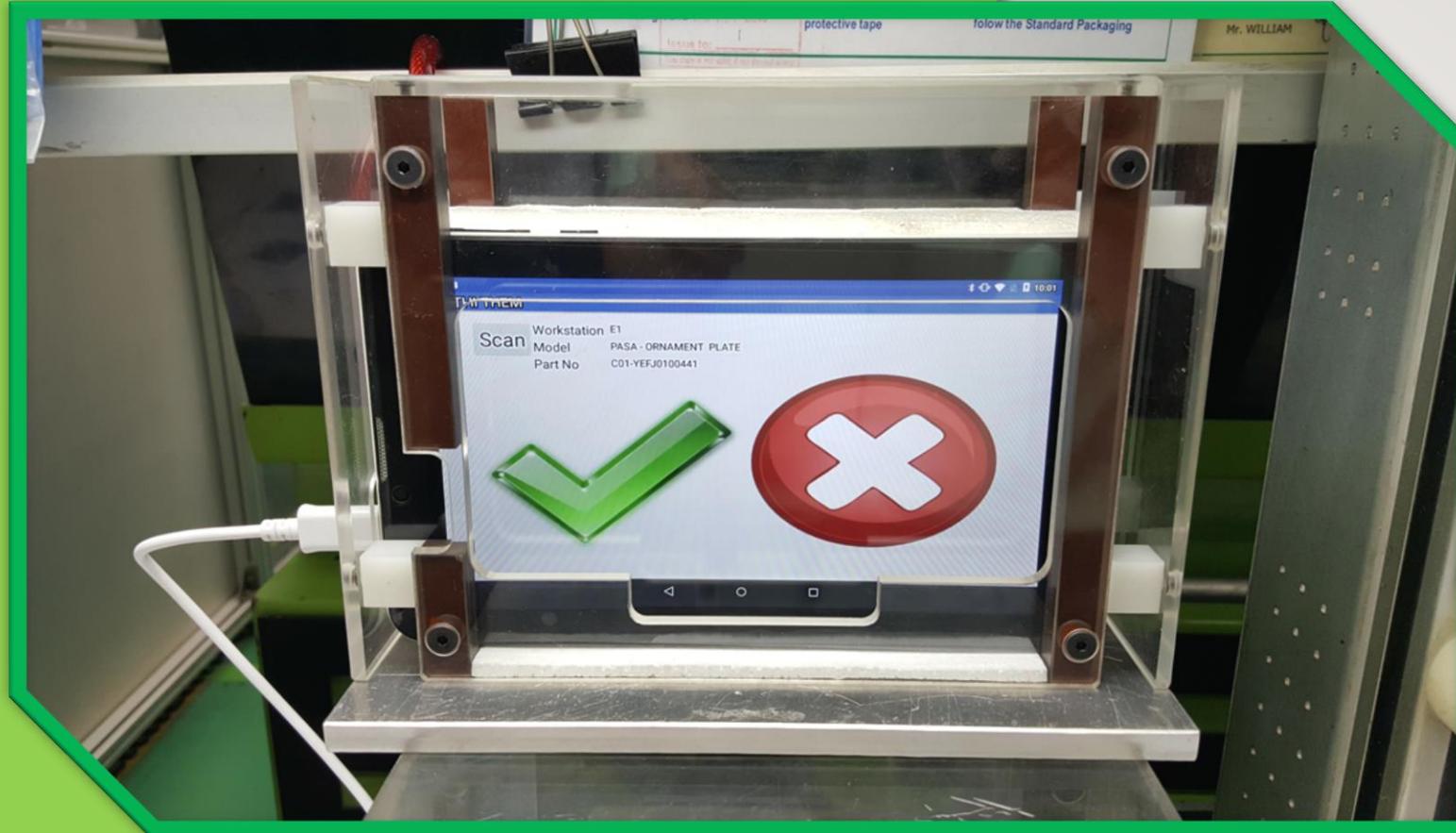
2011 Fortune Computer Repair

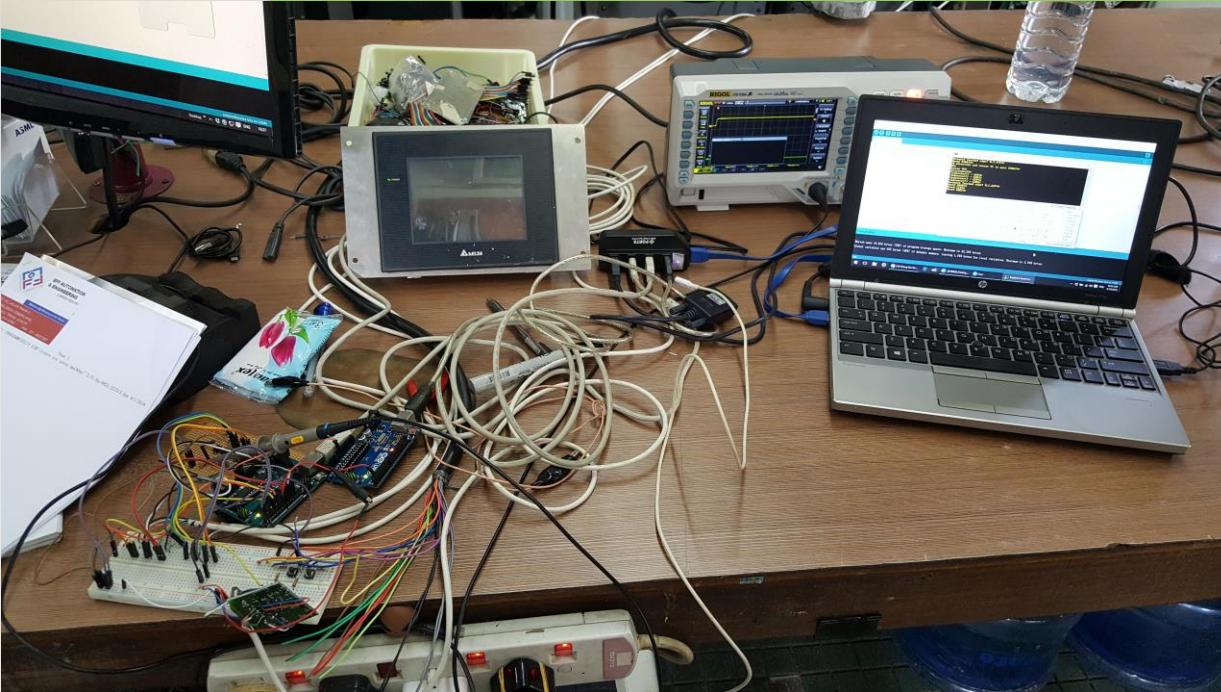
2021



2019 Fortune Machine Computer

Production Control System MOM MES SCADA @ 2015



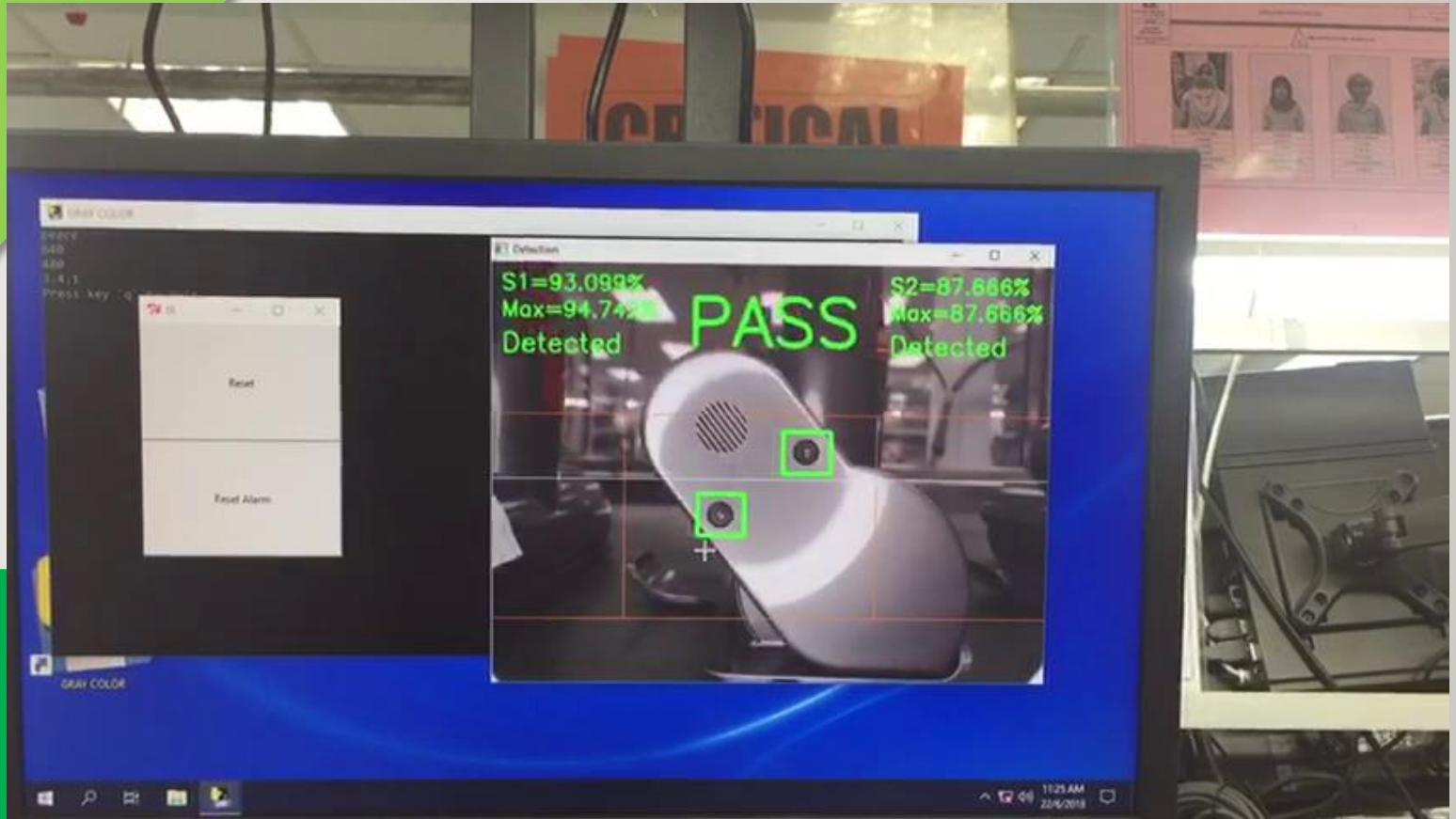


Automatic Spray Paint Machine
Delivered @ 2016



Business Intelligent Dashboard Implemented @ 2018

Vision Inspection First Industrial Implementation 2018



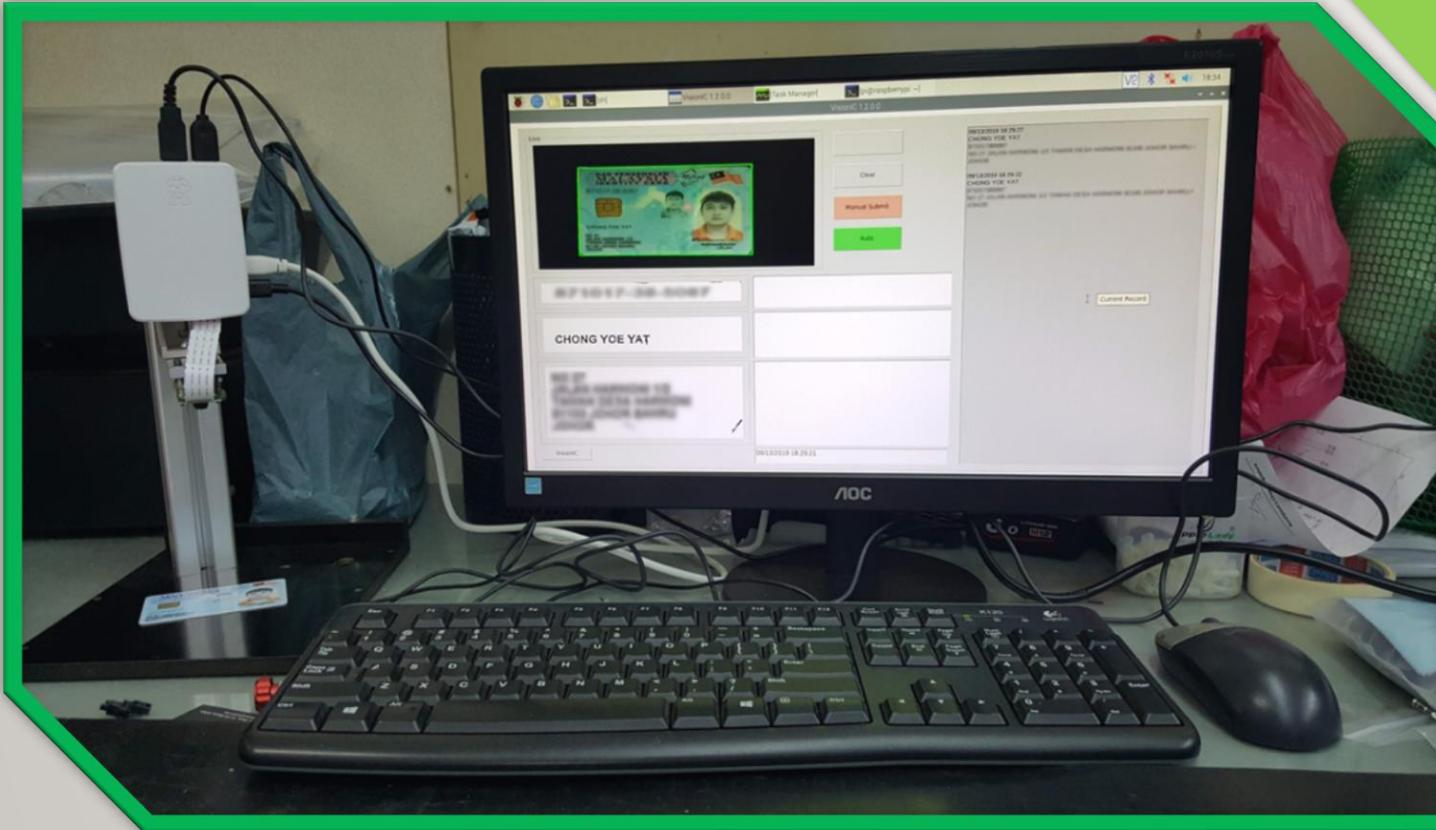
Vision Inspection Demo @ Robotex 2018



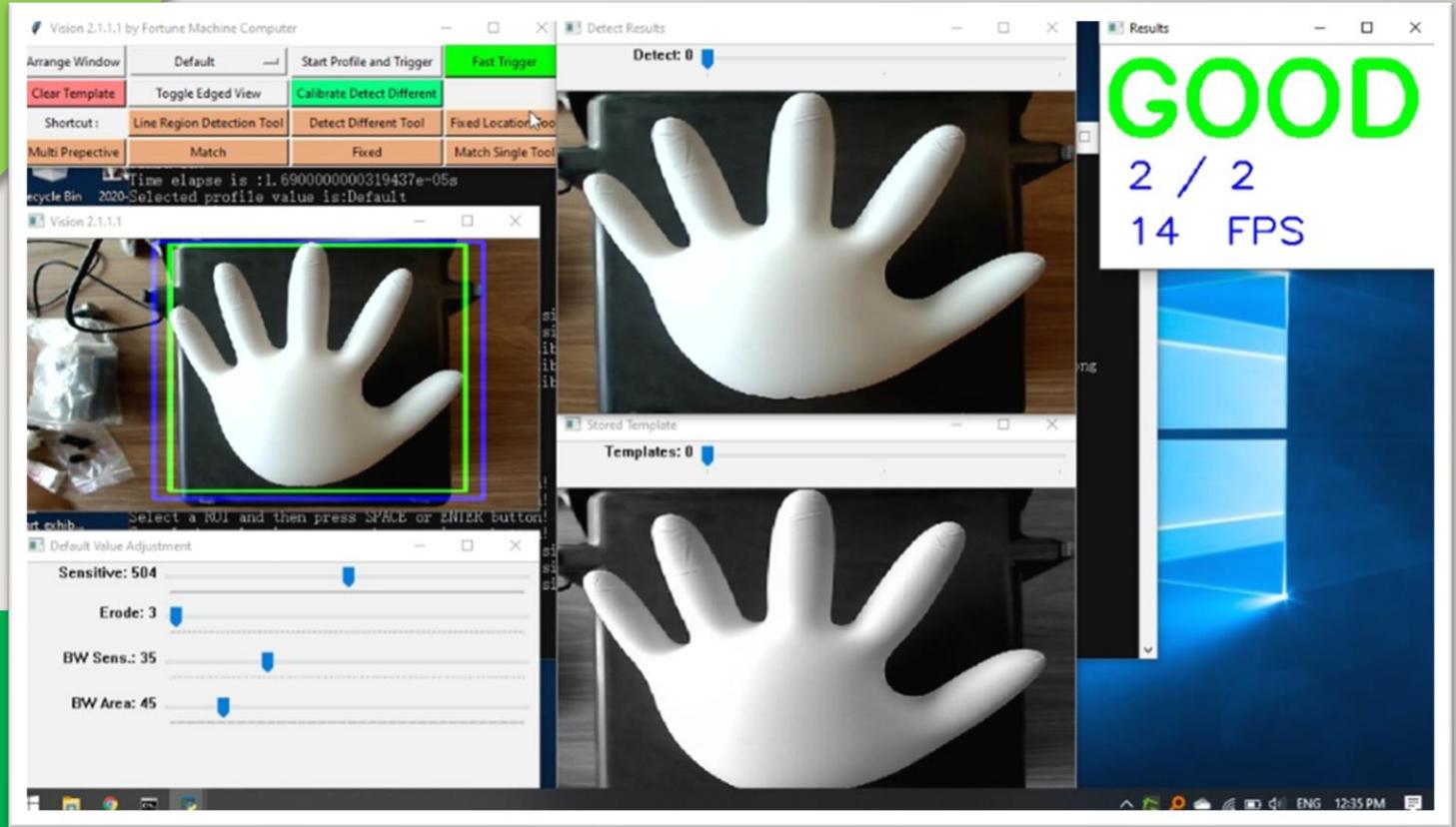


Vision Inspection Demo @ ITAP Singapore 2019

Vision Base Identification Recognition @ 2019



Vision Inspection v2.0 @ 2019





Plastic Molding Inspection Implementation @ 2019



First Industrial
Implementation for
label checking
@ 2019



Positioning Object Detection Compact Setup @ 2019

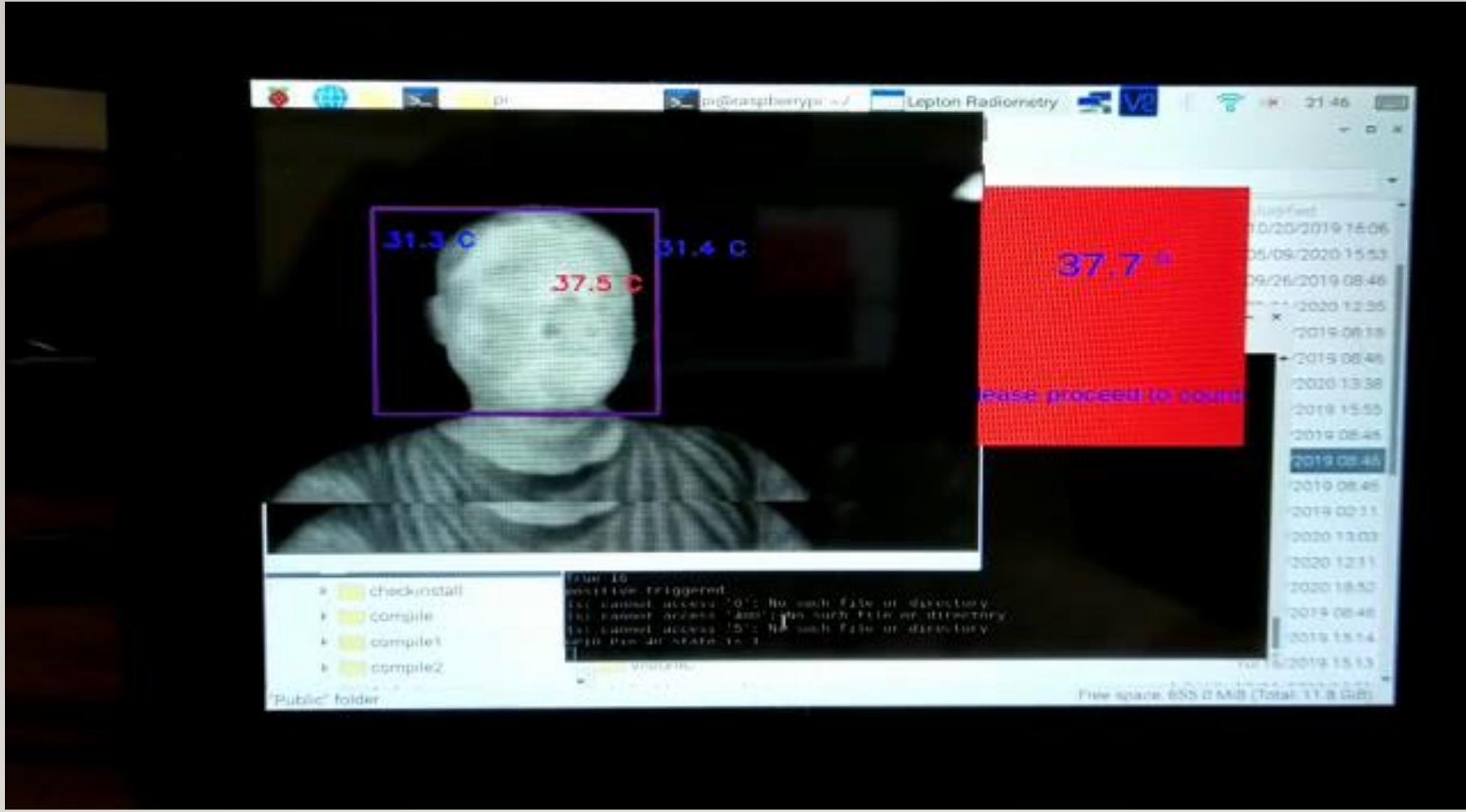




Product Part Inspection System
Implemented
@ 2020

General Vision v3.0 @ 2020

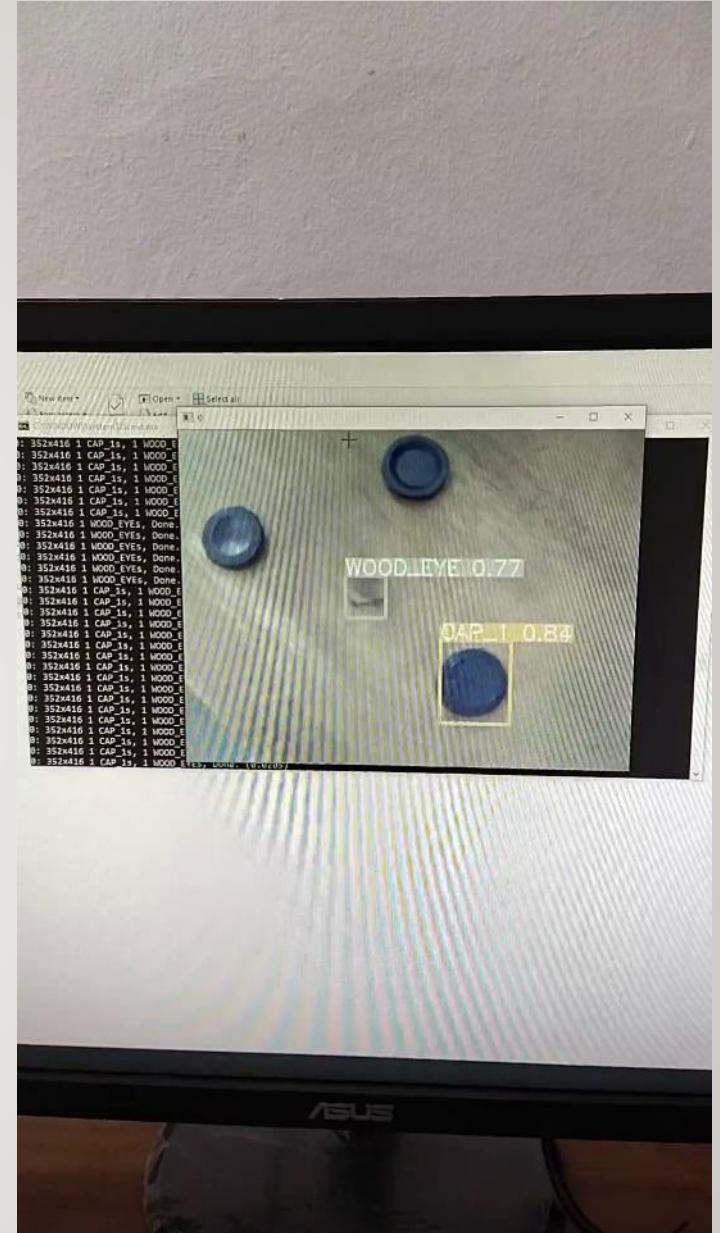




Thermal Imaging Customized Solution @ 2020

Automated Product Assembly Inspection Machine @ July 2020

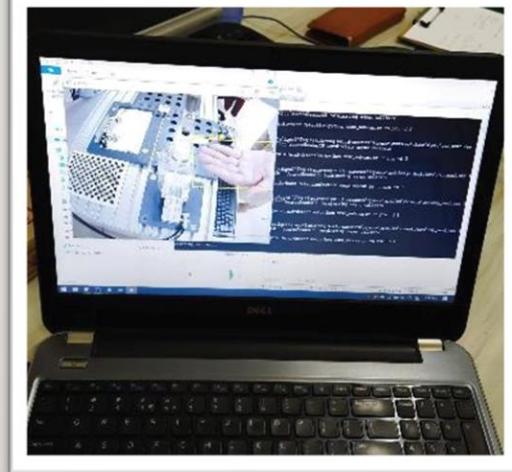
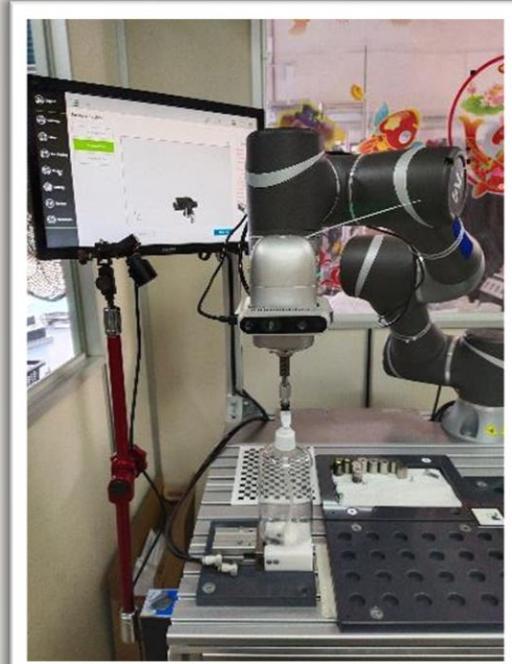
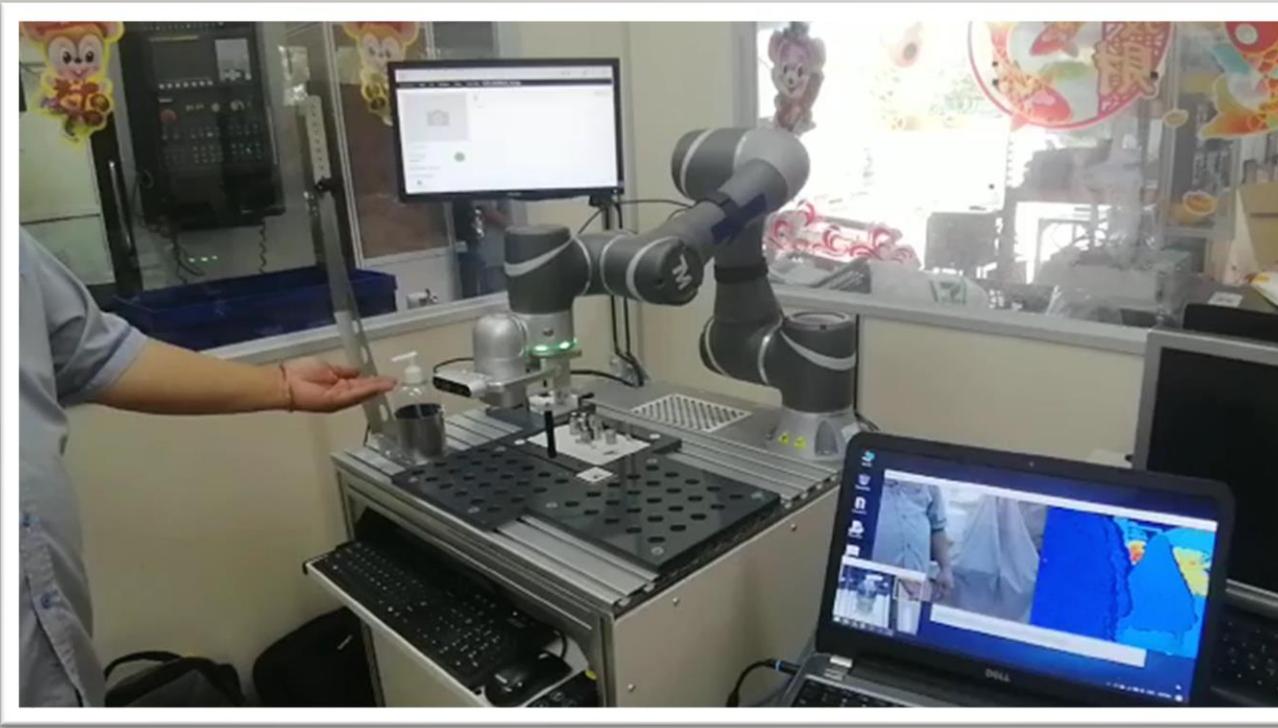




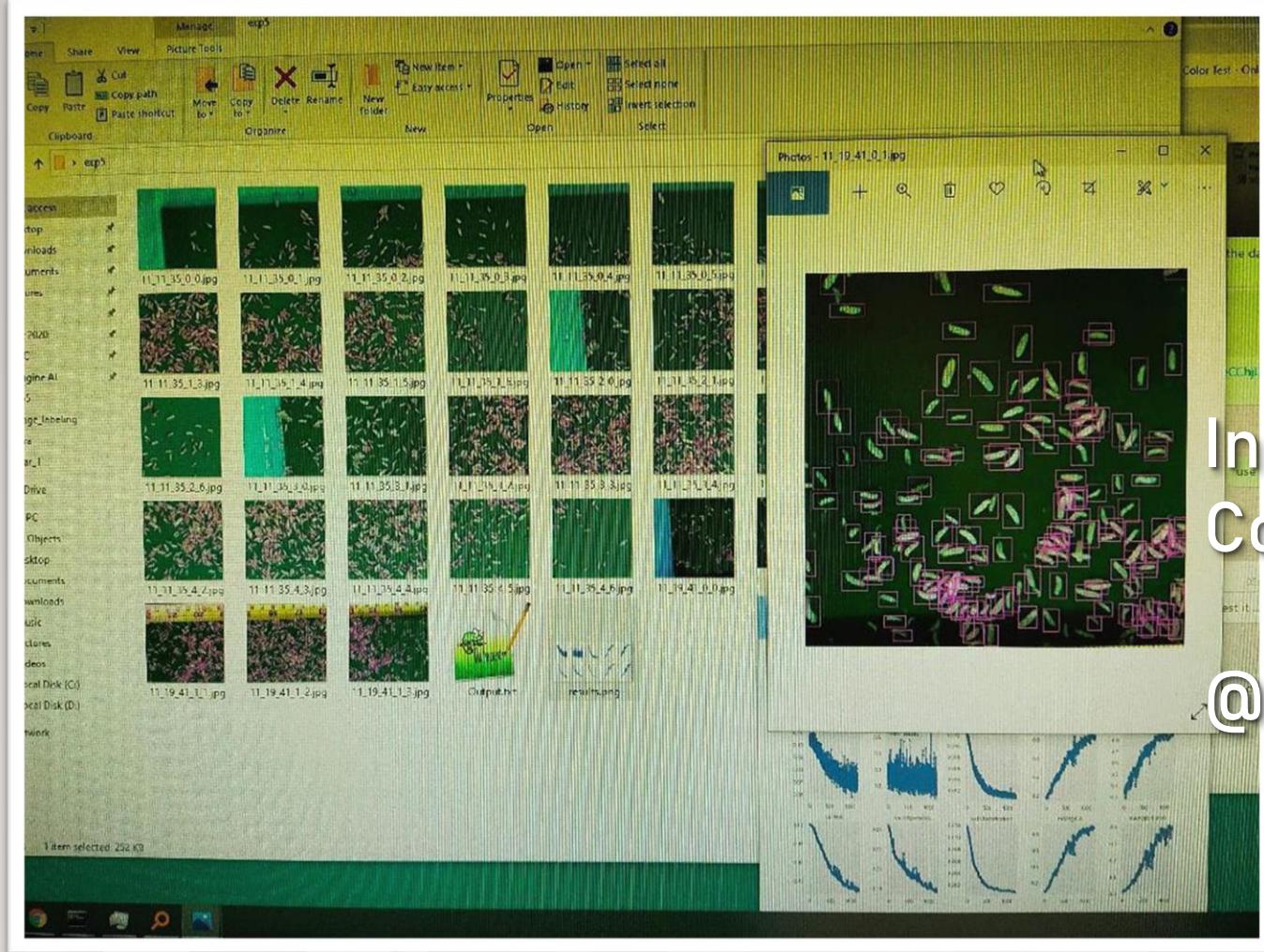
AI Object Detection Proof of Concept
@ 2020



Automated Product
Assembly Inspection Machine
@ December 2020



JDEC & WANDEL & FMC
collaboration technology demo for
AI Robotic ARM Multipurpose Hand
dispenser, Movement Follower &
Fruit Picker @ 2020 (Videos)



Insect Counting Proof of Concept

@ 2021



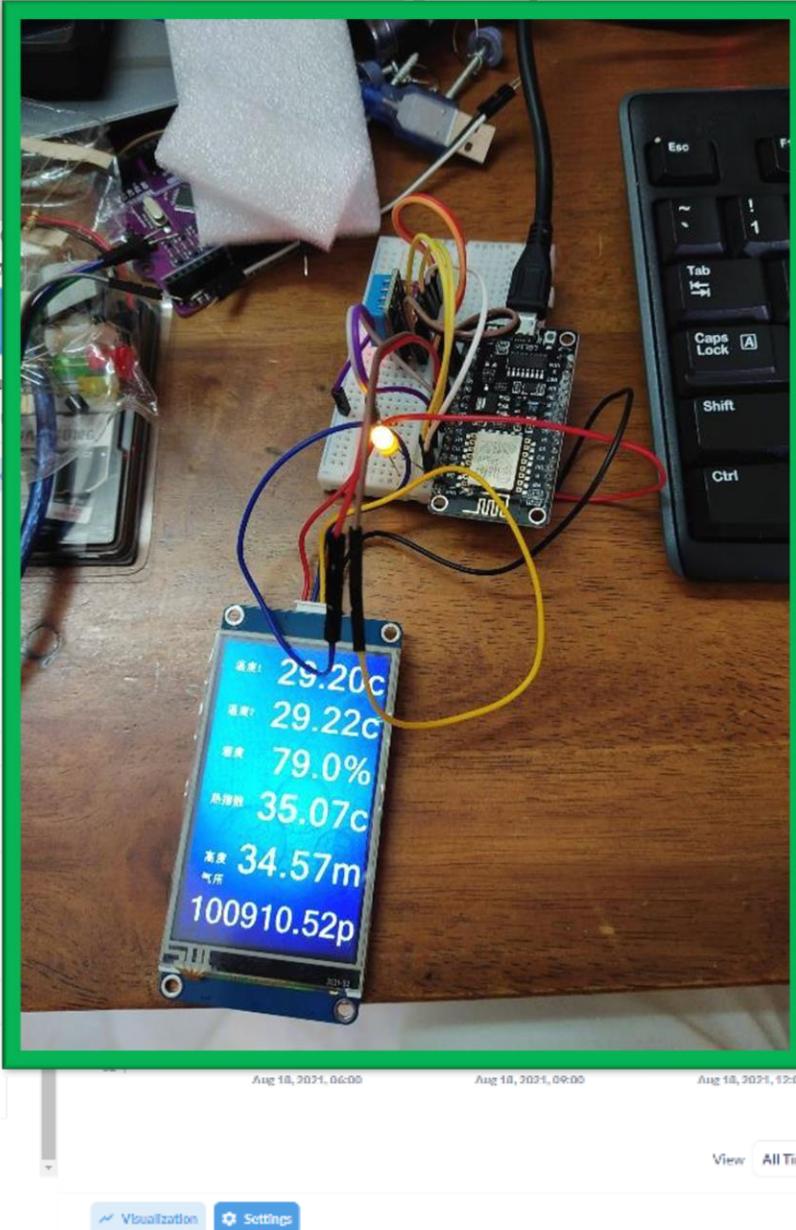
SUPPORT SYLLABUS AND PART
TIMELECTURER FOR RAFFLES
UNIVERSITY @ 2021

Industrial Internet of Things @ 2021



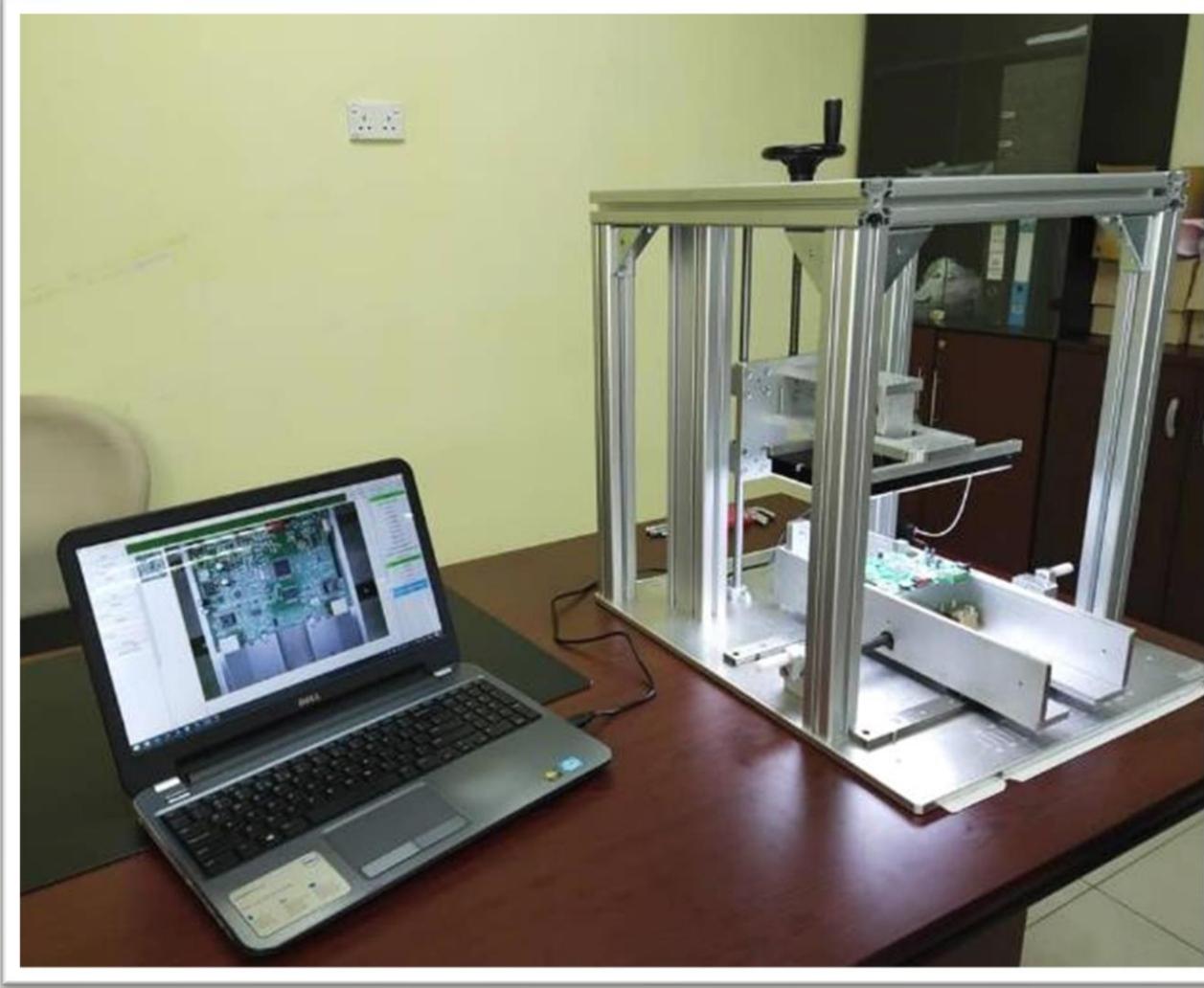


Vision Inspection Minimized Setup 2021

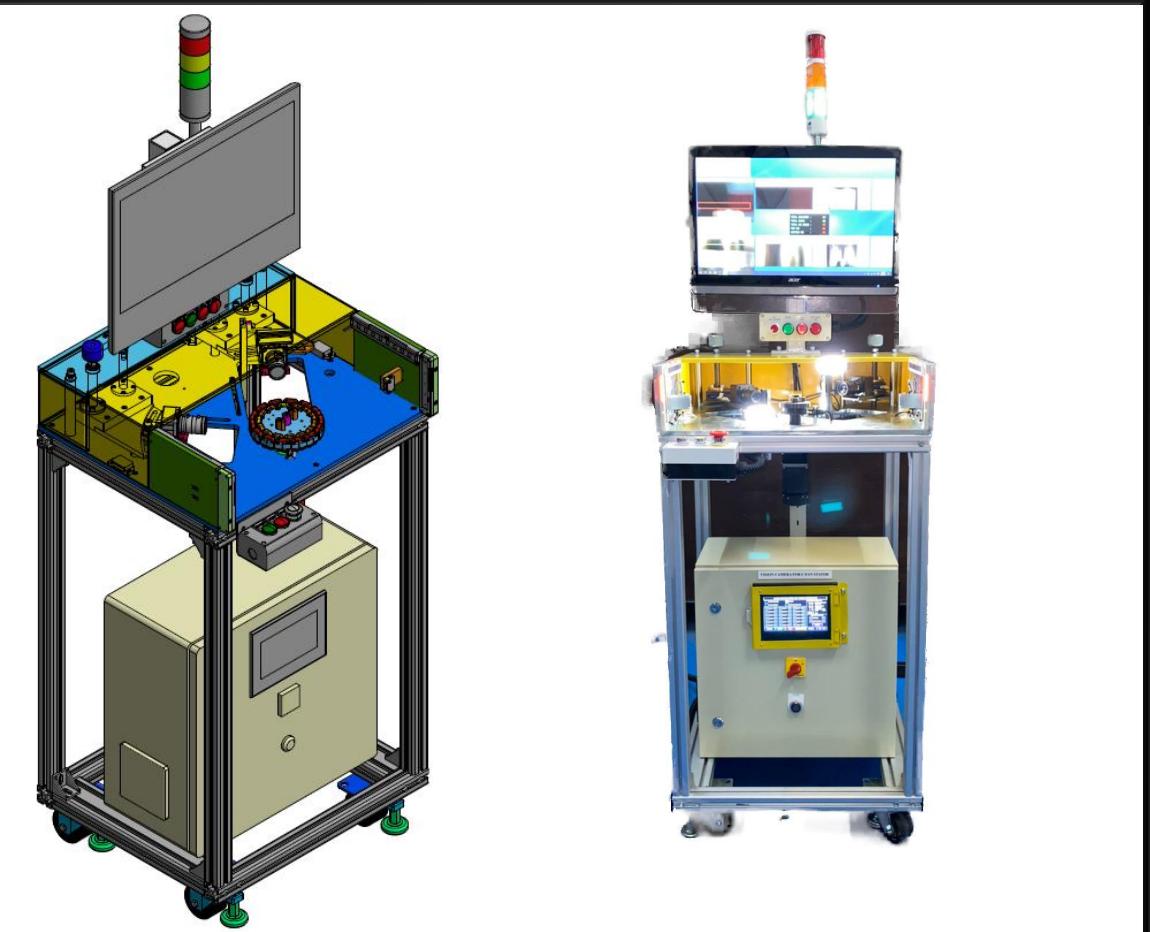


IOT MQTT DATA LOGGER

@ Aug 2021



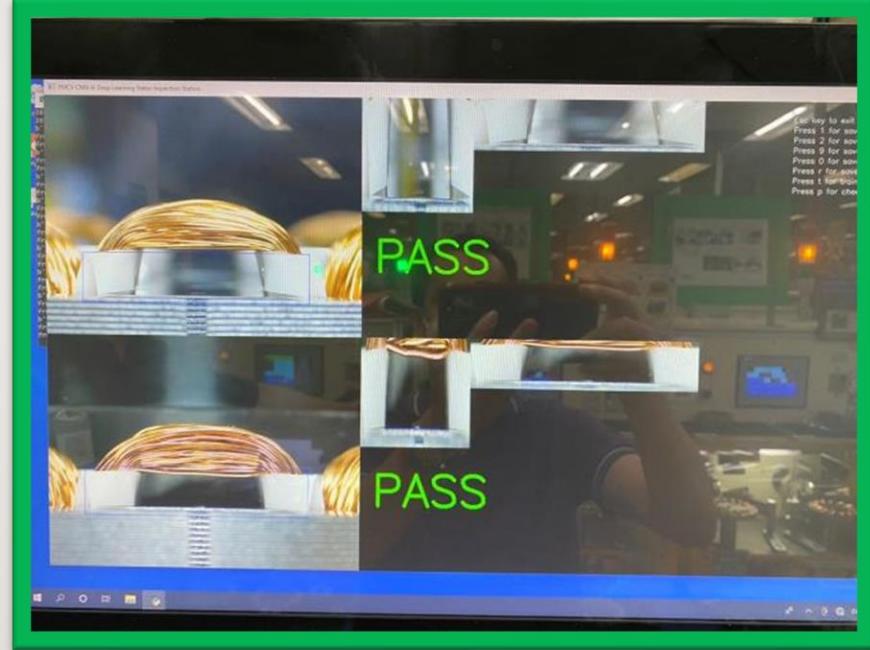
PCB Inspection Standard Product
@ 2021



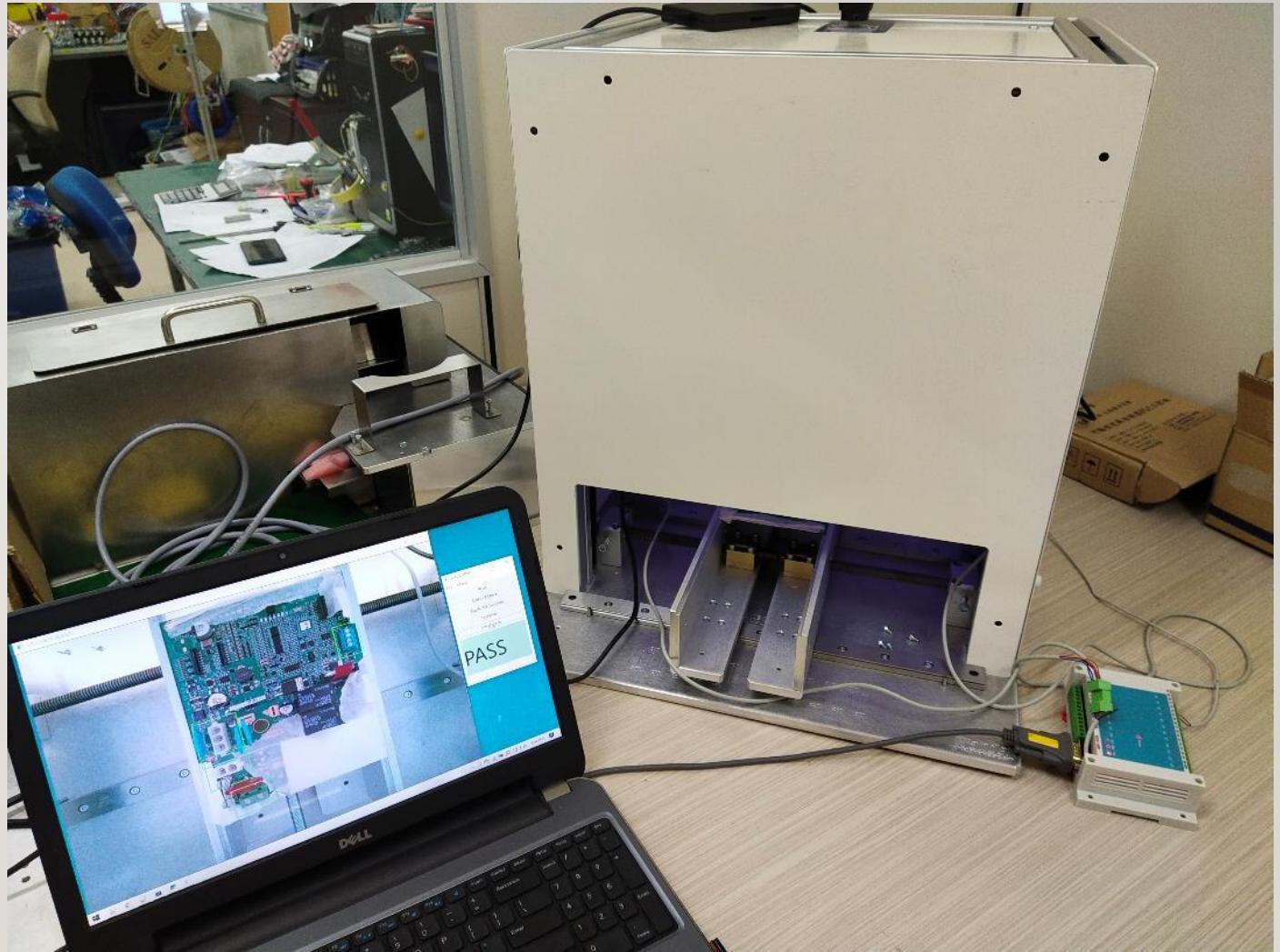
-
- FMCV x Customise Machine Series

**Stator Inspection Machine
@ Aug 2021**

AI CNN Deep Learning Inspection System @ SEP 2021

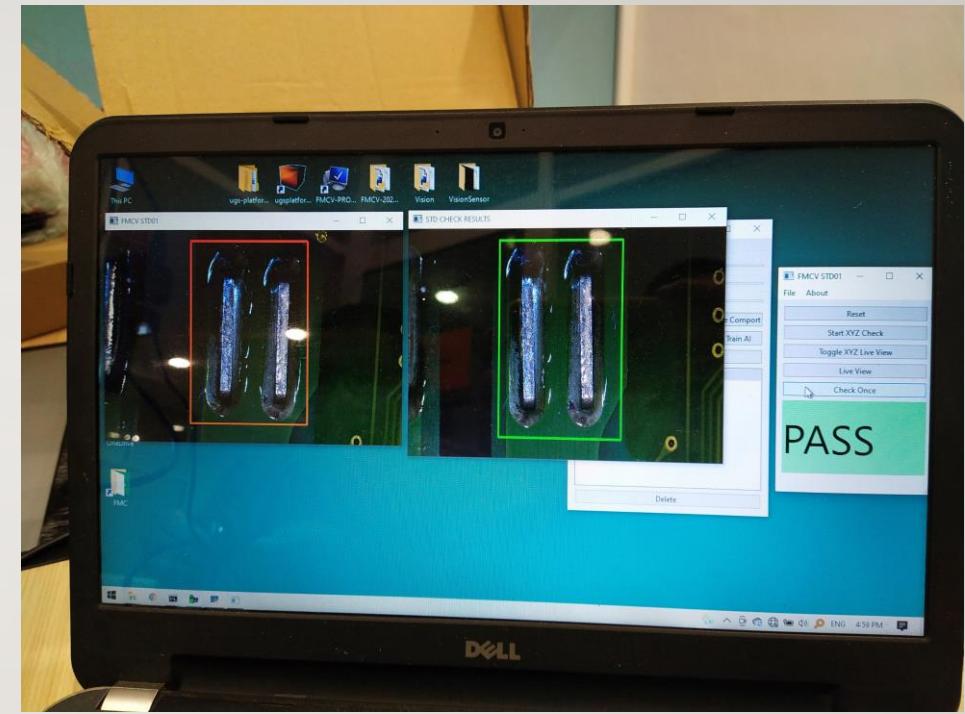


**FMCV STD01
@ OCT 2021**



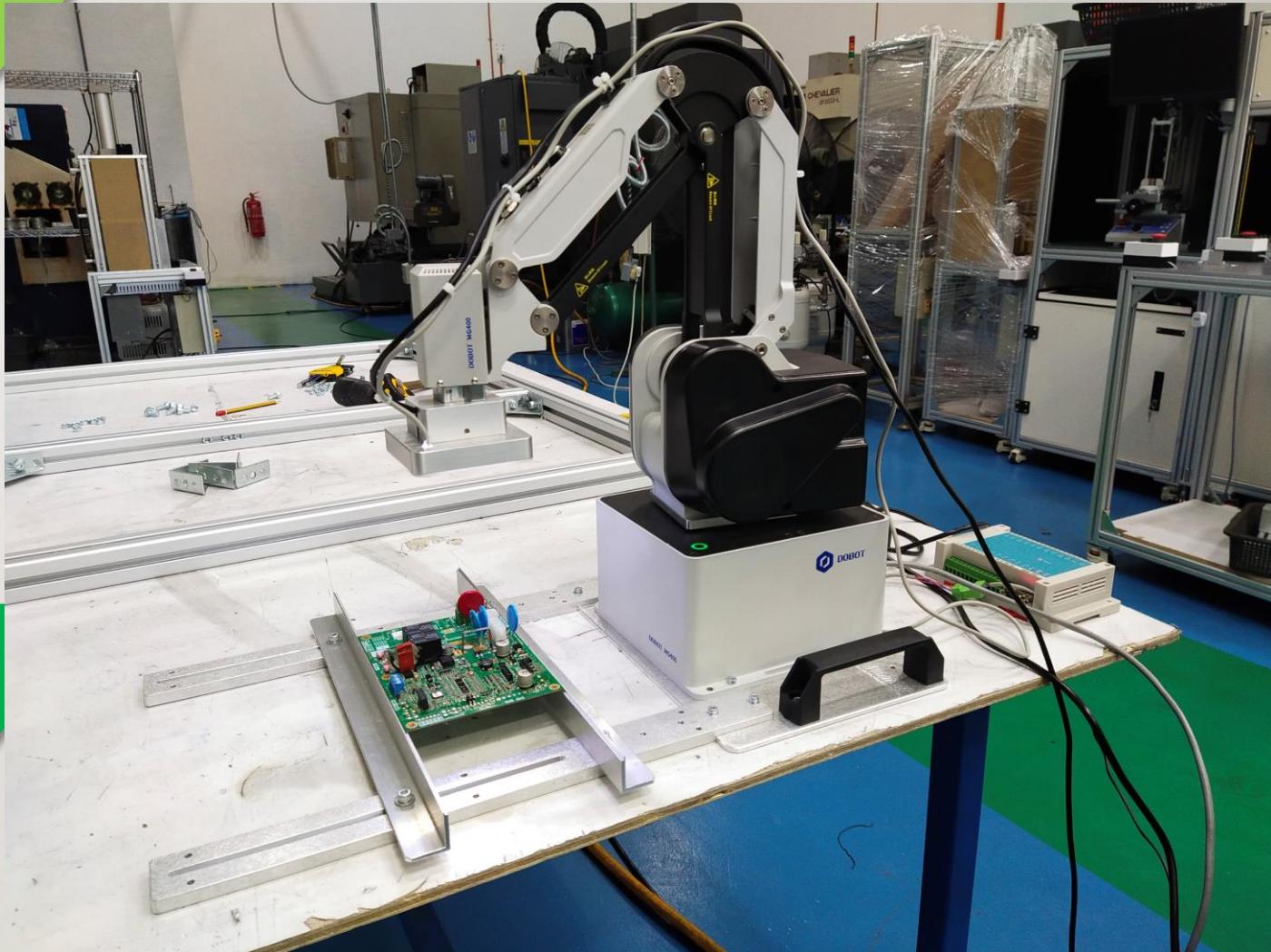


**FMCV STD02 XYZ
@ OCT 2021**

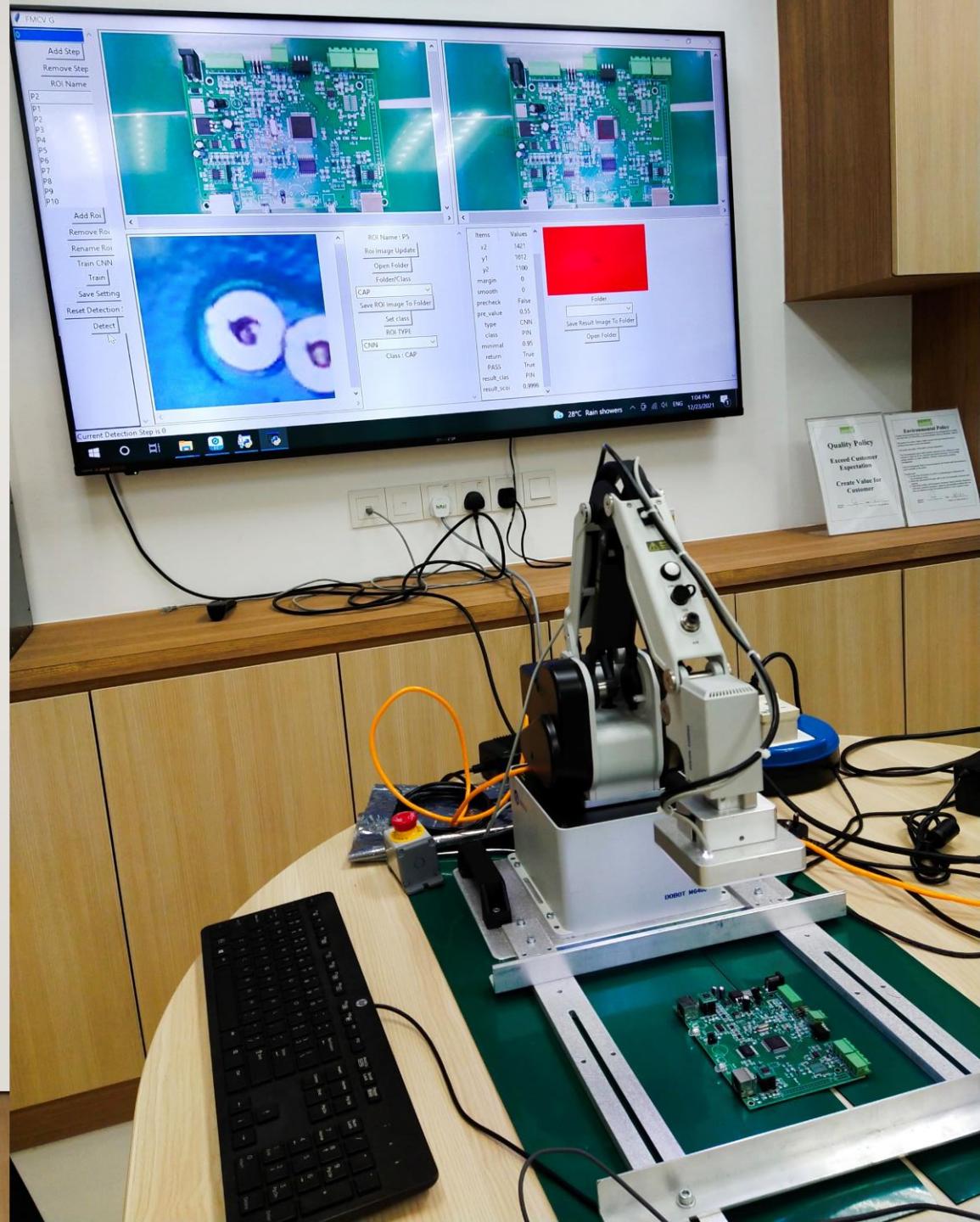


**FMCV AI Deep Learning
Solder Quality Inspection
@ OCT 2021**

AI CNN Deep Learning Inspection System Robot Integration @ NOV 2021



AI CNN Deep Learning Inspection System Robot Integration @ NOV 2021

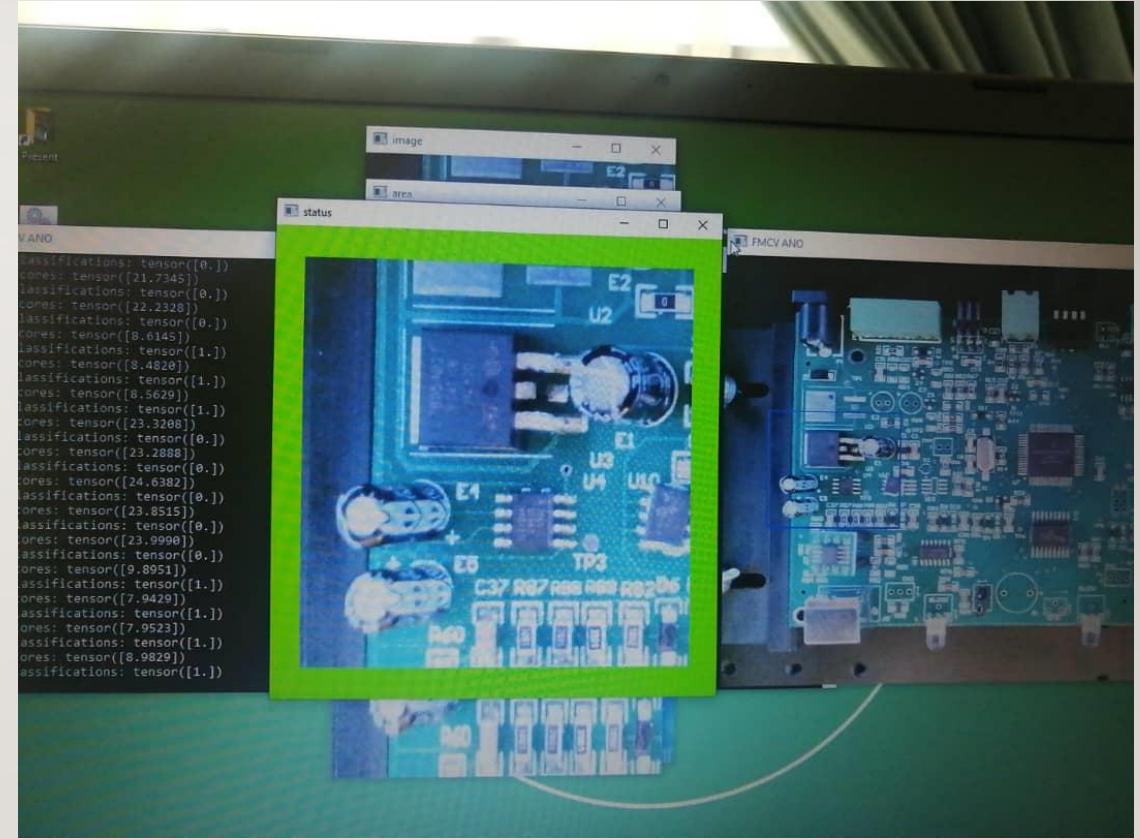
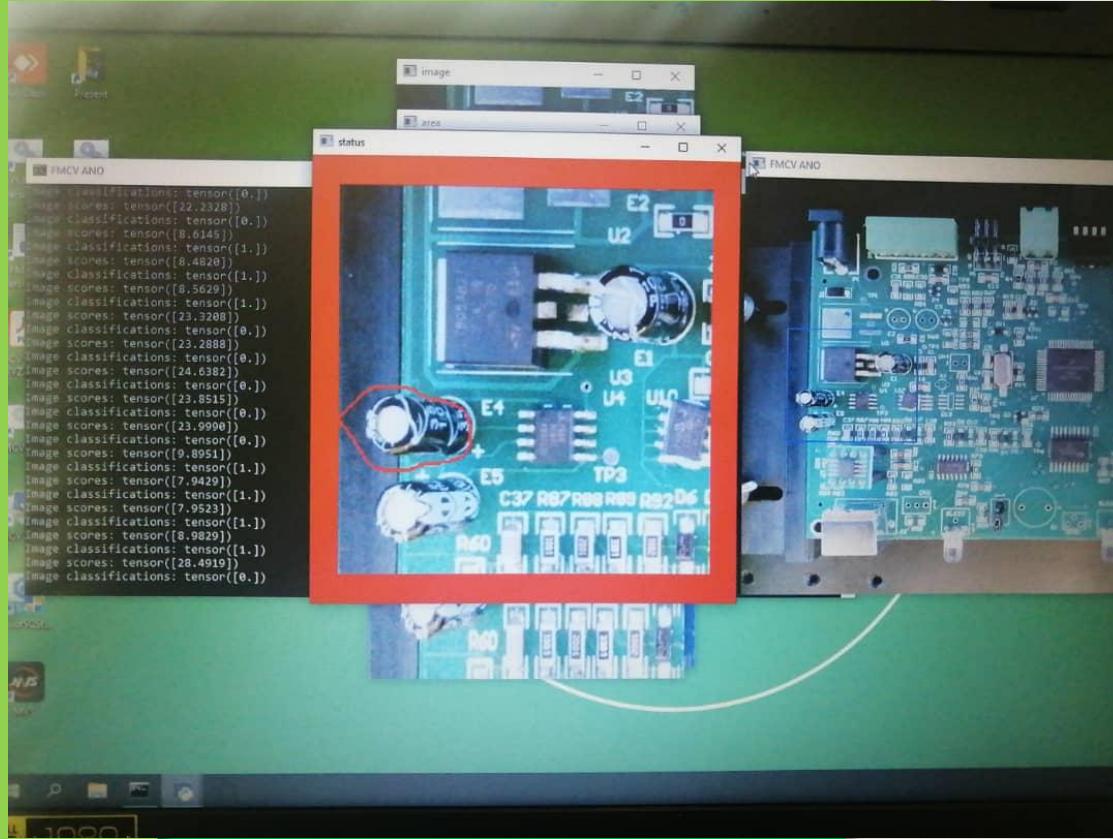




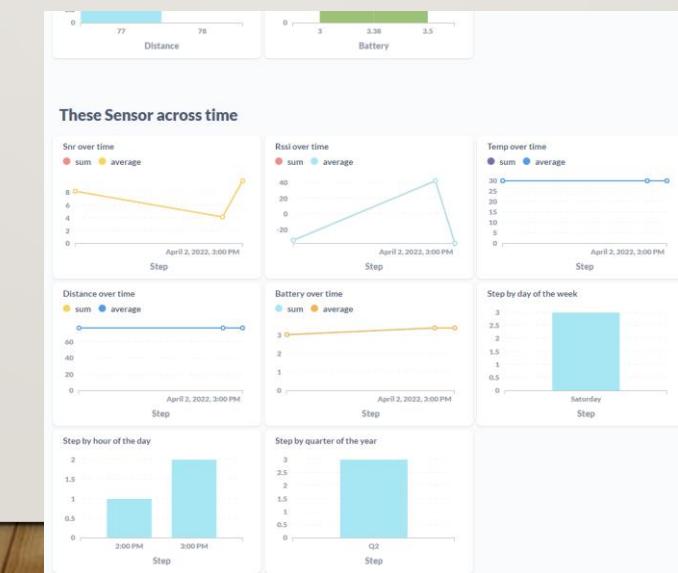
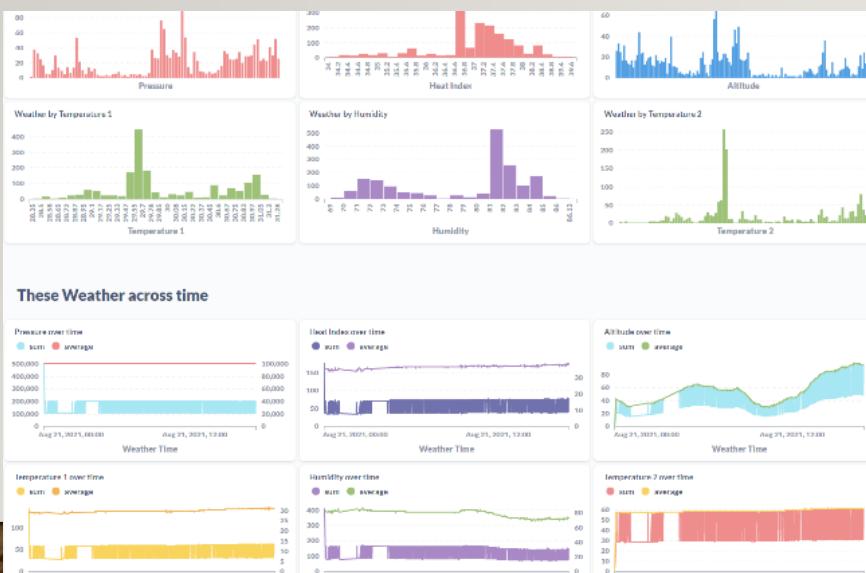
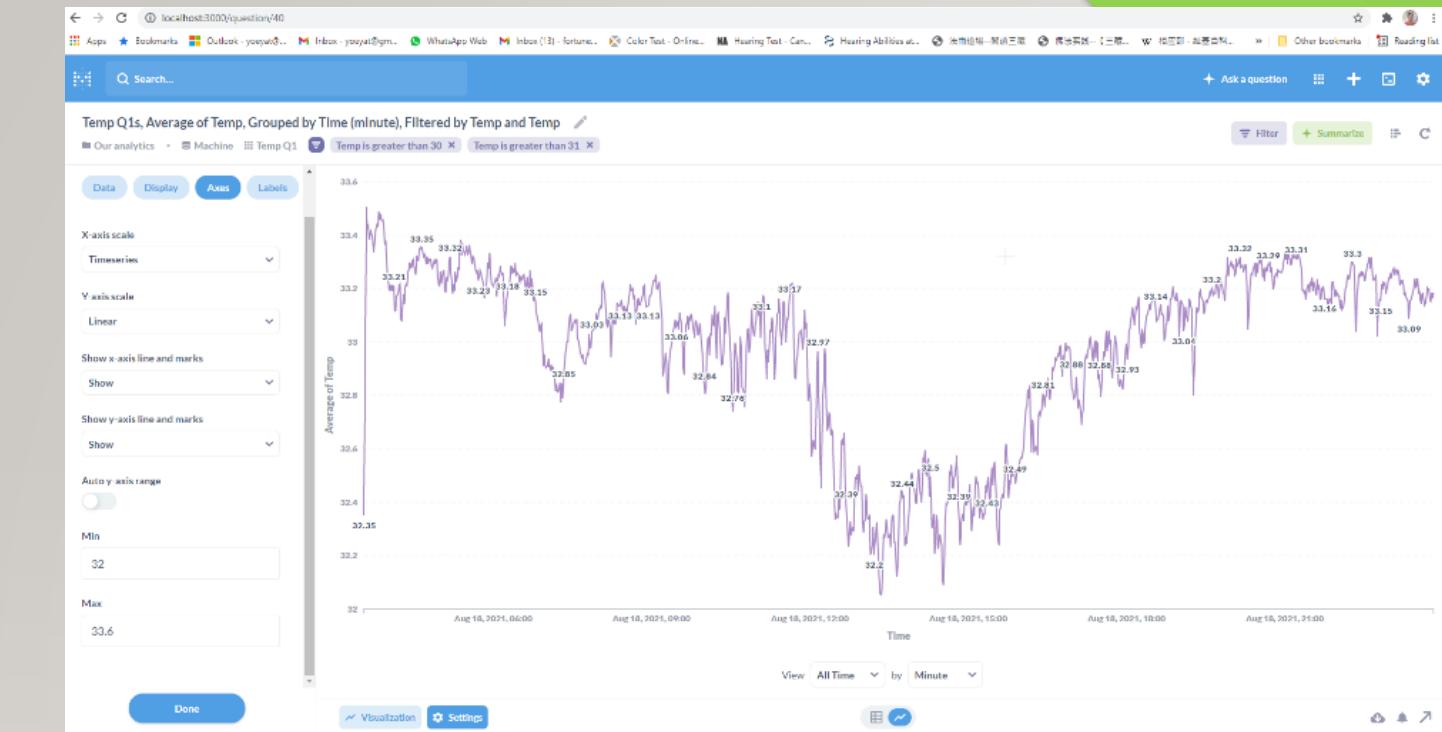
FMCV JAKA Robot Integration
@ November 2021

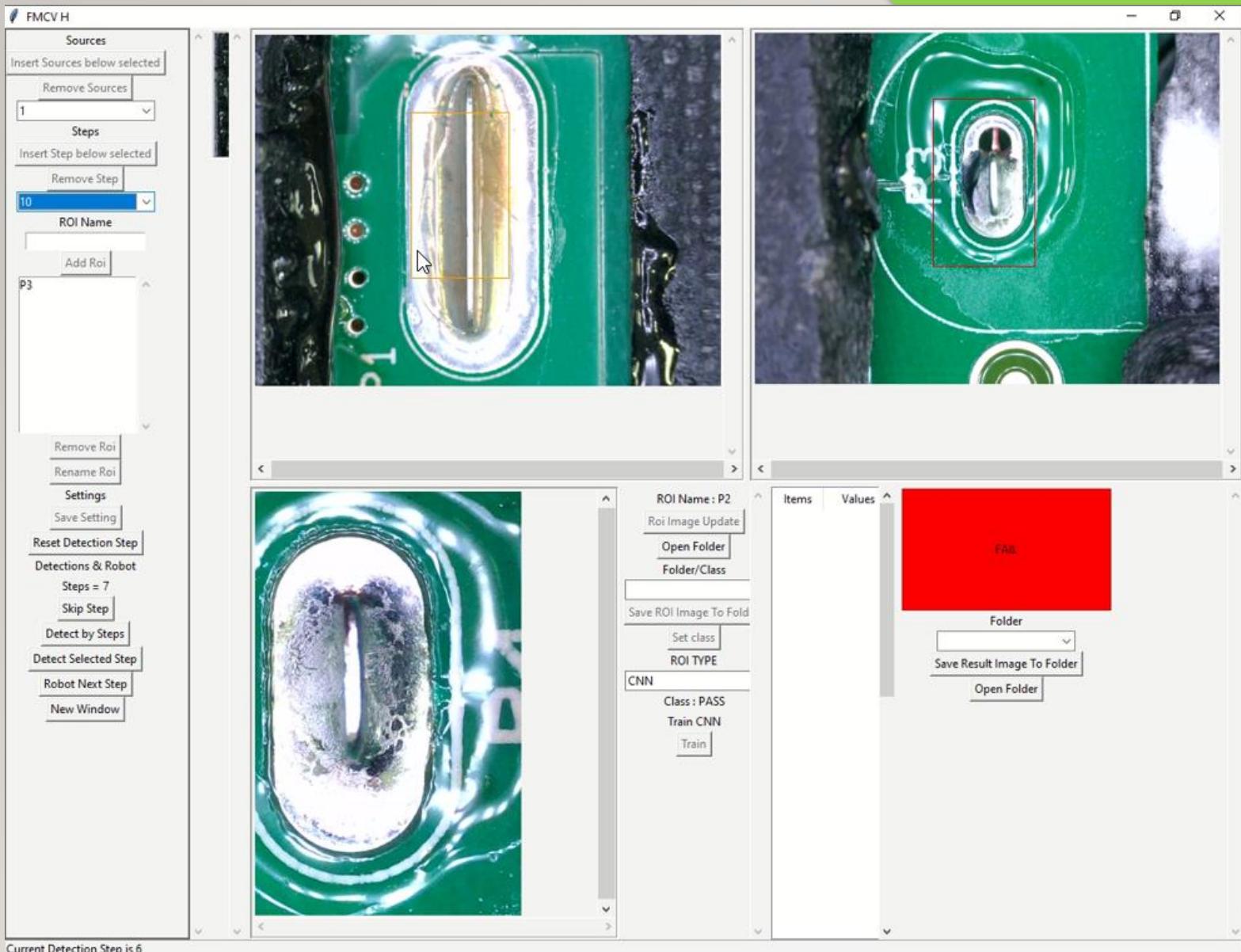
FMCV_ANO

@ Nov 2021



Lorawan Industrial IOT @ Apr 2022





FMCV H (8 Gen)
@ Apr 2022

-
- COMMENTING ROBOTIC SYLLABUS
STRUCTURE FOR SOUTHERN UNIVERSITY
COLLEGE @ 2021
 - COORDINATE TBM TOP FLOW SOUTHERN
UNIVERSITY COLLEGE VISIT
@ 2022





FMCV Repeat Orders
@ Apr 2022

-
- FMCV New Orders of Kaifa & VS
@ May 2022





FMC Custom Build JAKA
6DOF 6-Axis miniCobot
Robot Integration Projects
@ JUNE 2022

FMCV_H Quick Machine Integration Projects @ July 2022



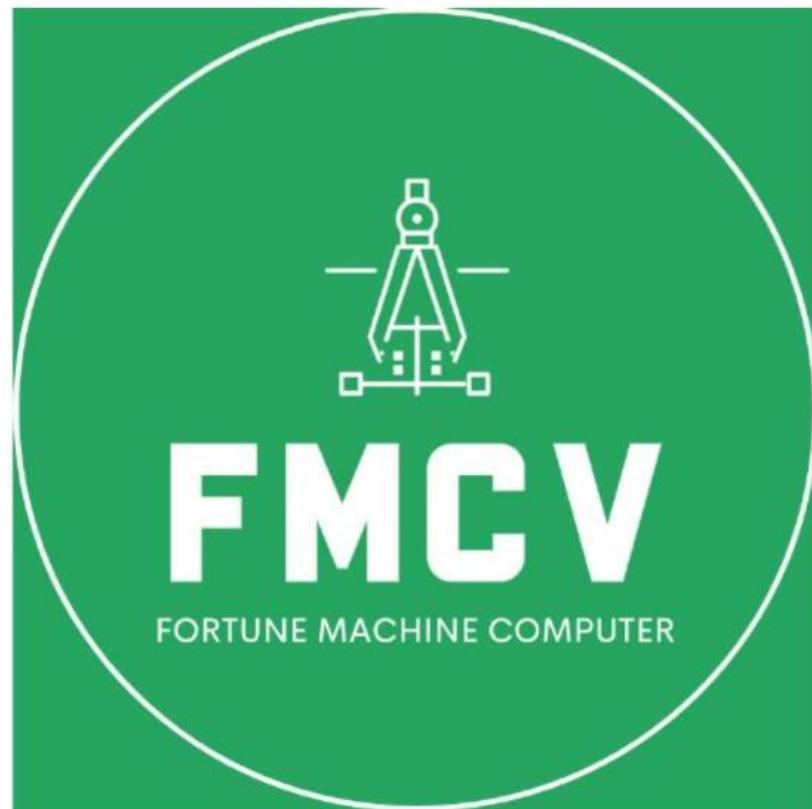


FMCV_H Cobot New
Product Launching
@ July 2022



Lesson:

Lesson speed



Fortune Machine Computer



Ask Lecturer & Answer the question

<< Back

Pause

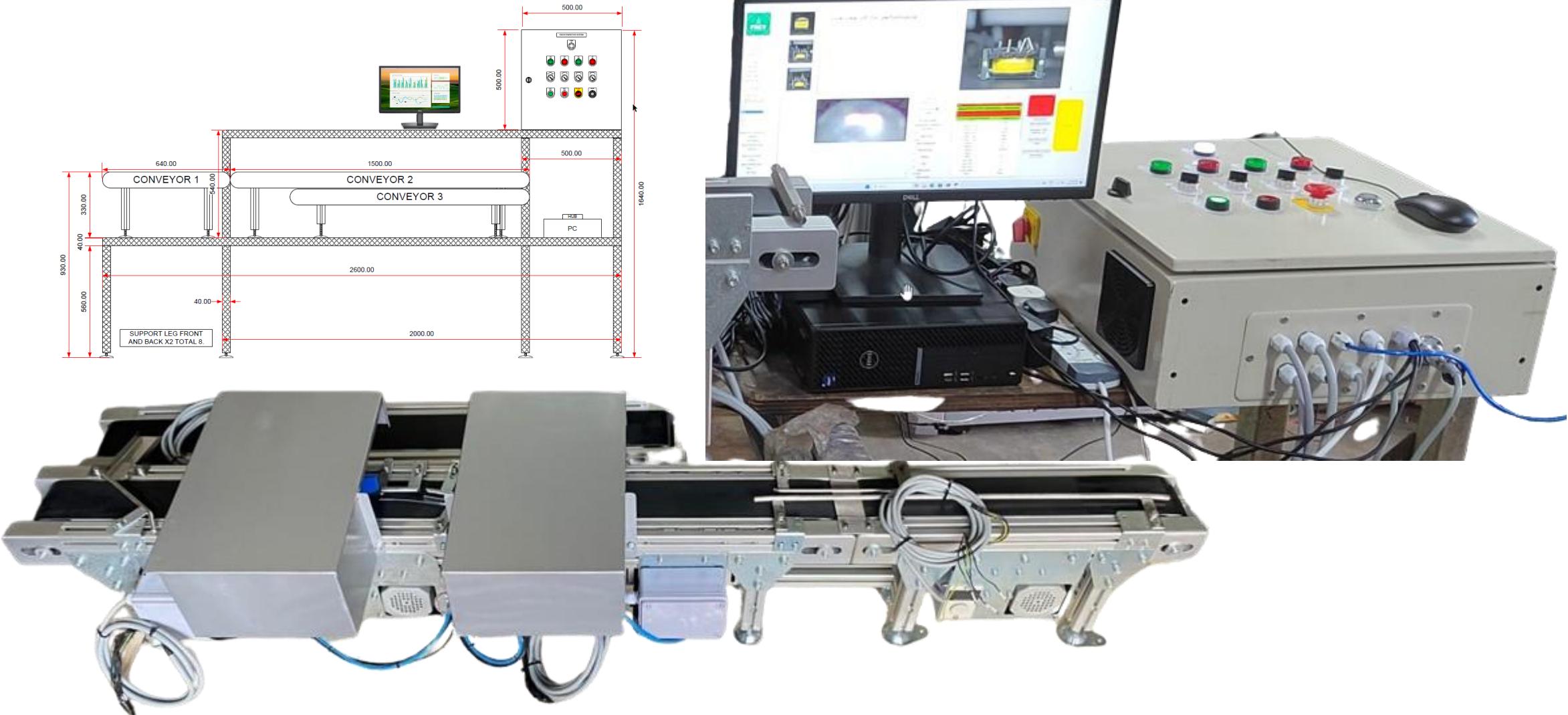
Start lesson

Continue

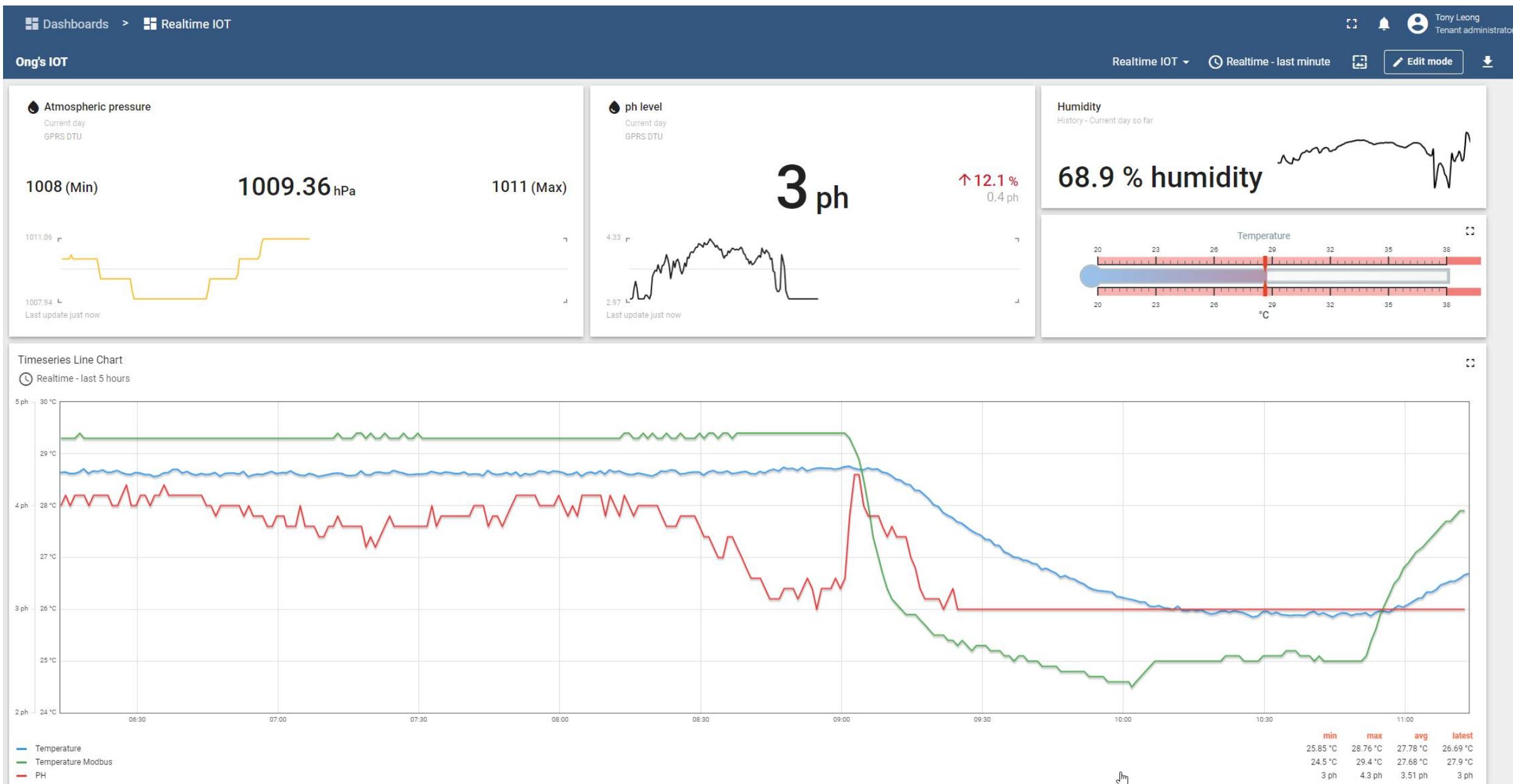
Send

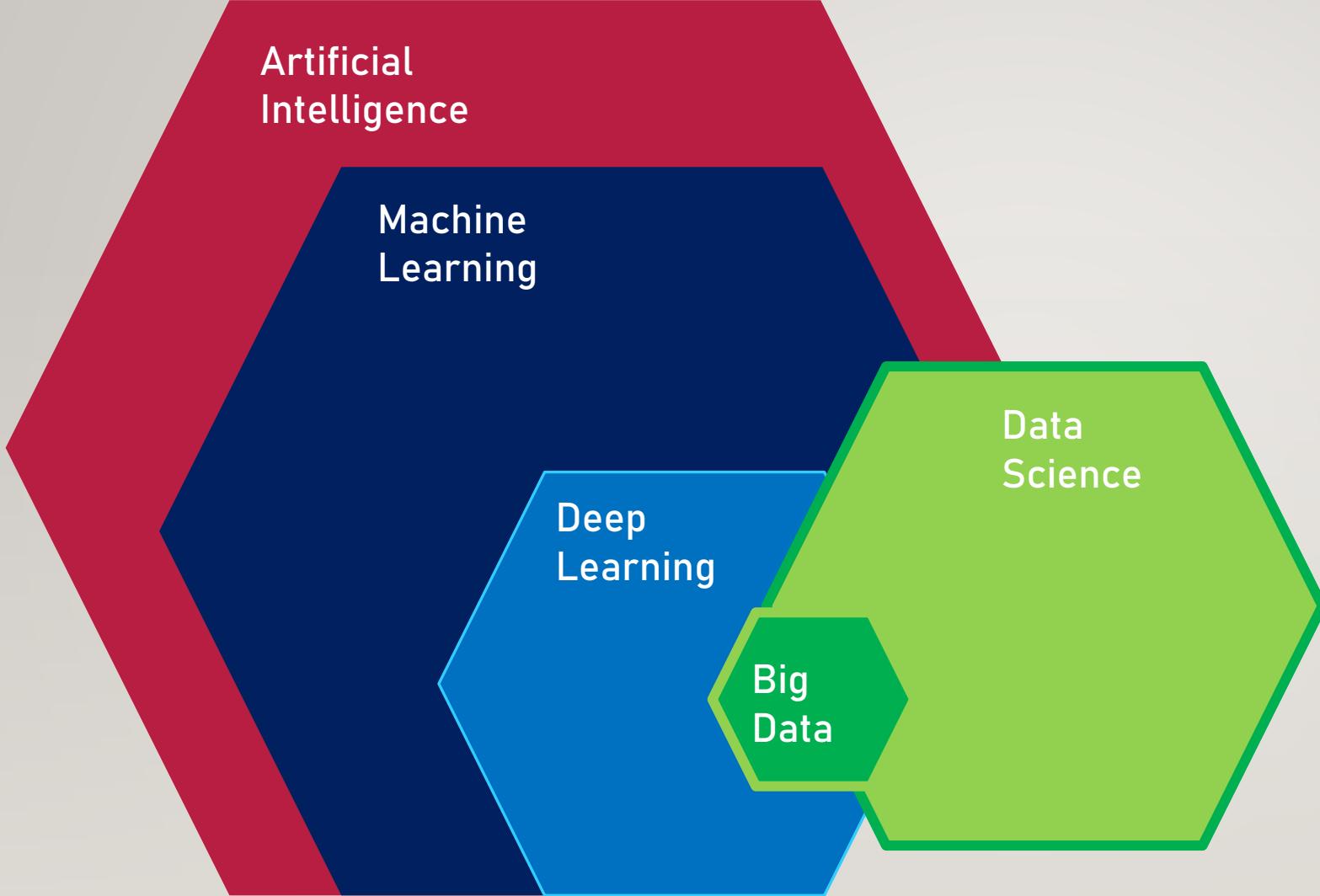
Sanwa transformer inspection (Jakatar)

@2024



I.O.T. Data Acquisition x Business Intelligent Series @2024





ARTIFICIAL INTELLIGENCE IN VISION & ROBOTICS

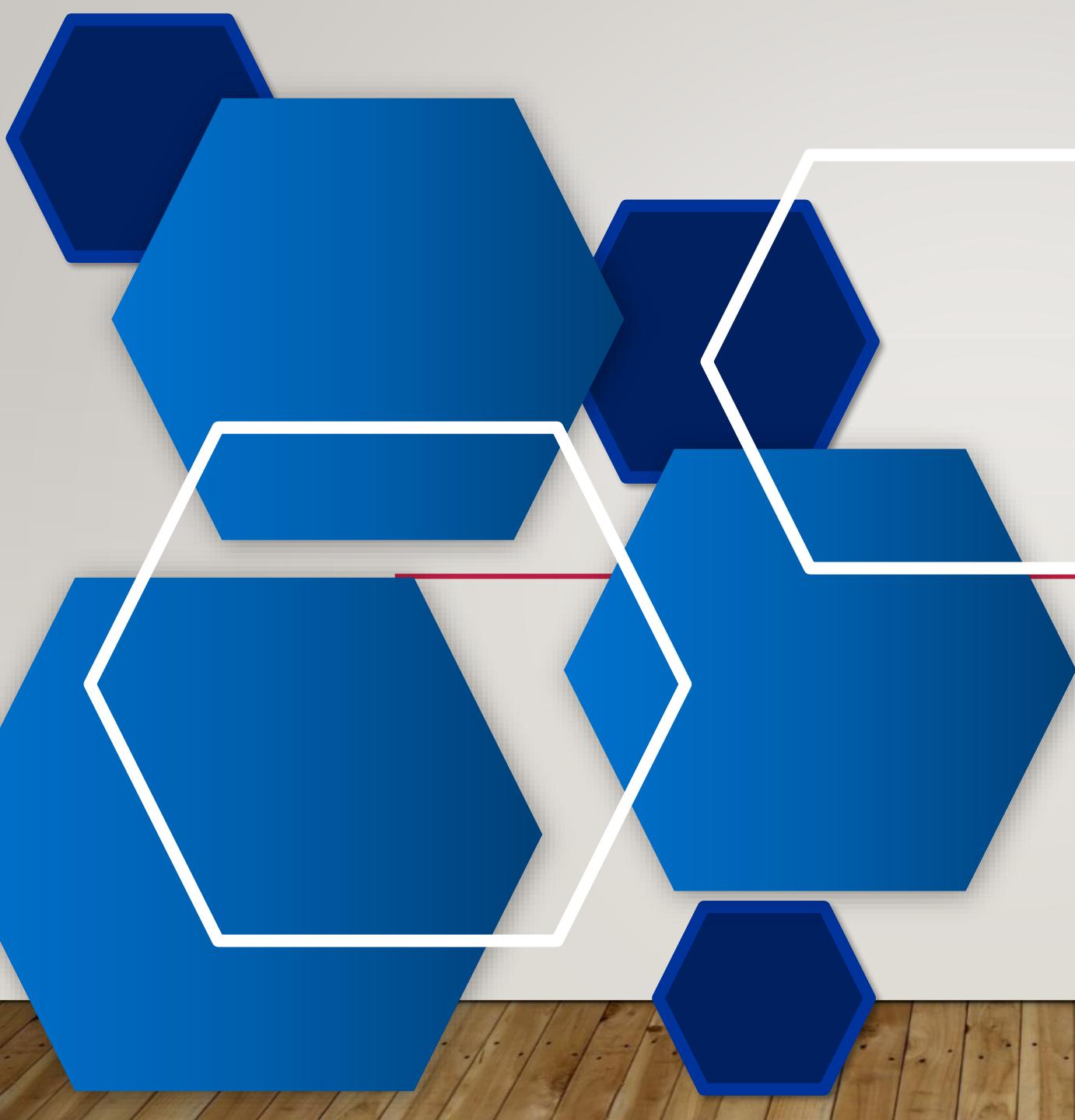
Teaming with:

- Wandel Engineering
- ATOM
- BSTECH
- CED
- Prosper Tech
- BSKM

- Scuttle
- Katapult Asia
- Fujimaster
- Robomatic
- And many more...

End-User Customers

- Panasonic
- Flex
- TDK
- MEIBAN
- VS
- VSE
- Kaifa
- Sanwa
- Dyson
- And many more...



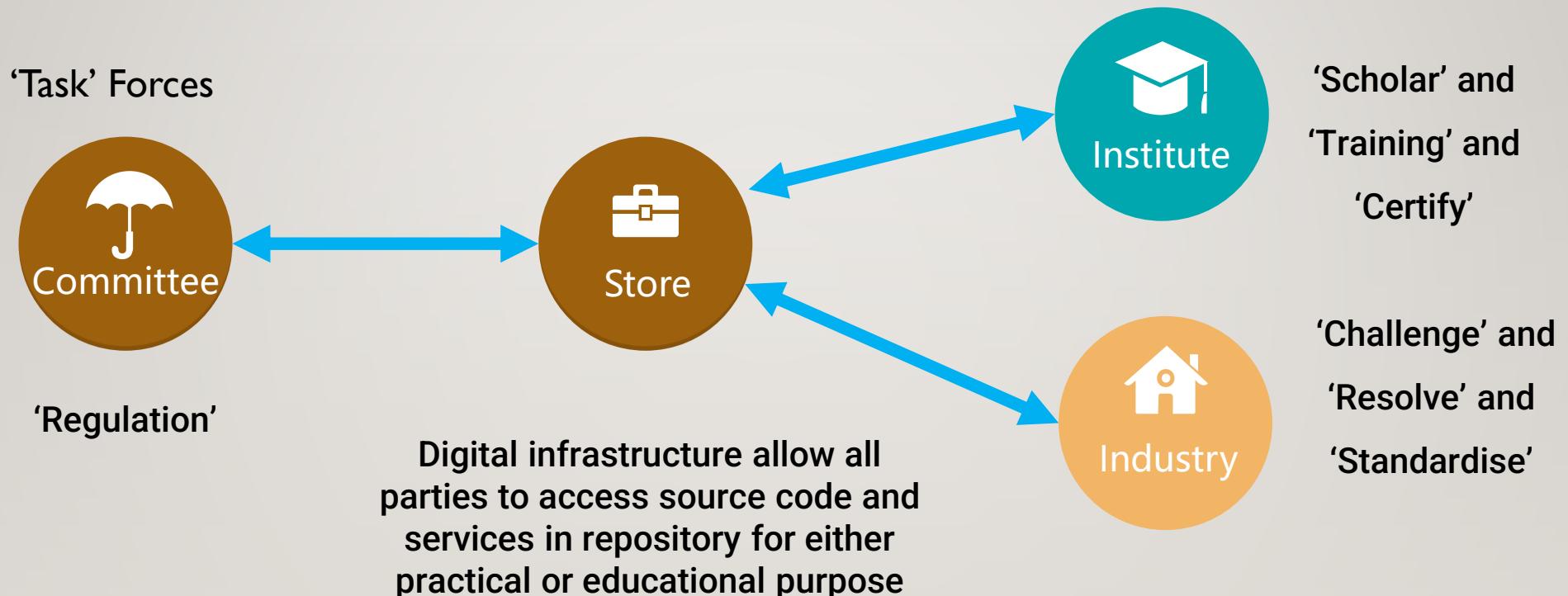
FMC

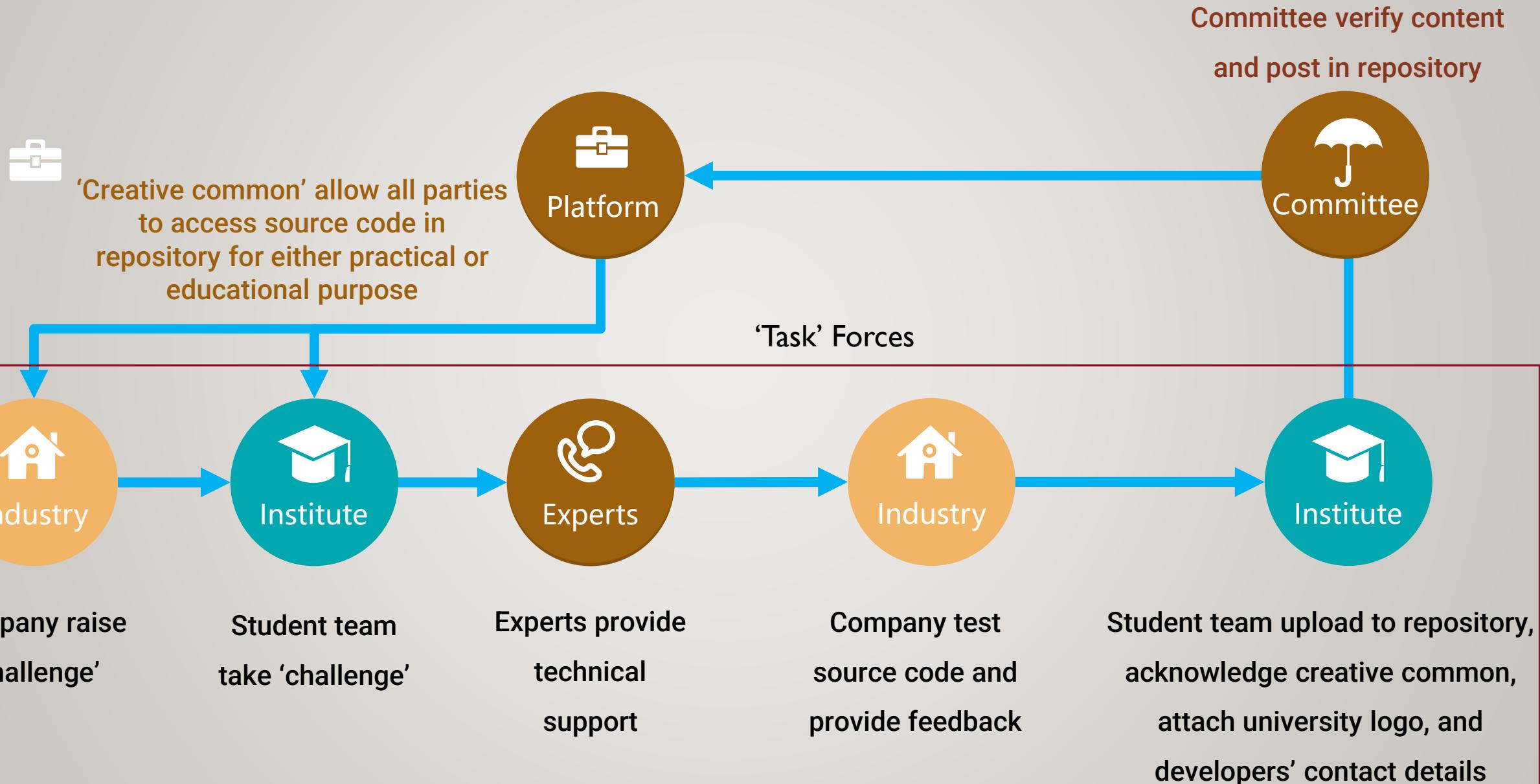
OPEN-SOURCE MOVEMENT





Digital Infrastructure Framework





DIGITAL INFRASTRUCTURES

- 
- Open Standards
 - Open-source software specifications
 - Open-source design specifications
 - Application program interfacing
 - Public data regulations
 - Certification



OPEN SOURCE INDUSTRIAL 4.0 MOVEMENT

SCADA Supervisory Control And Data Acquisition

https://github.com/cyysky/FMC_OEE

MES Manufacturing Execution System

MOM Manufacturing Operations Management

<https://github.com/cyysky/ERP>

AI Artificial intelligent projects

FMCV Fortune Machine Computer Vision

https://github.com/cyysky/FMCV_H

AGV/AMR Automated Guided Vehicles (AGVs)

<https://github.com/scuttlerobot/SCUTTLE/>

FMC INDUSTRIAL 4.0 SYSTEM

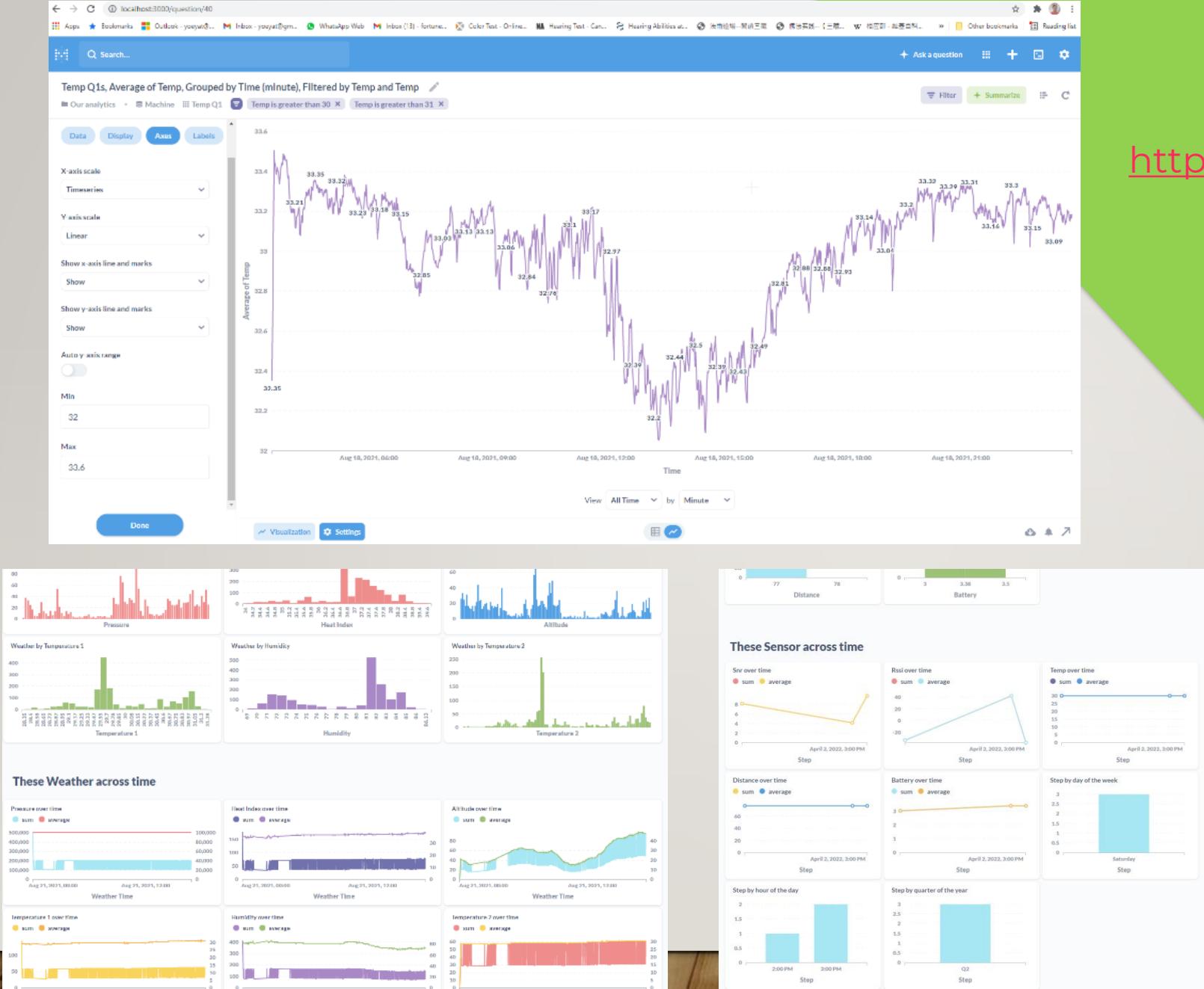
<https://github.com/cyysky/ERP>

The screenshot shows a web browser window for the FMC Industrial 4.0 System. The title bar includes tabs for "GitHub - cyysky/ERP: Open Source" and "Employee Records". The address bar shows the URL "Not secure | sunchonghome.asuscomm.com:8000/main_page". The page itself has a header with the word "Master" and a navigation menu with links like "Log Out", "Main page", "Project", "Order", "Sales Order Category", "Production Order Category", "Data records", and "Image". Below this is a large blue section with the text "Main page". The main content area contains a table with multiple rows and columns of data.

Type	ID	Name	Object1	Object1	Email	Phone1	Time	EMD Time	Actions	
Type	ID	Name	Address	Term	Email	Phone1	Phone2	Time	Actions	
Product ID	Date	Proeess_id	BOM ID	Time	EMD Time	Actions				
Product ID	Date	Machine Proeess ID	BOM ID	Time	EMD Time	Actions				
ID	Part No	Grade	Size	Select	Quantity	Time	Actions			
Type	ID	Name	Address	Term	You/P/O/No	You/P/A/No	Description	Qty	Unit Price	Time
Type	ID	Name	Address	Term	Email	Phone1	Phone2	Time	Actions	
Tybe	ID	Name	Address	Term	Email	Phone1	Phone2	Time	Actions	
Tybe	ID	Part no	Grade	Size	select			Time	Actions	

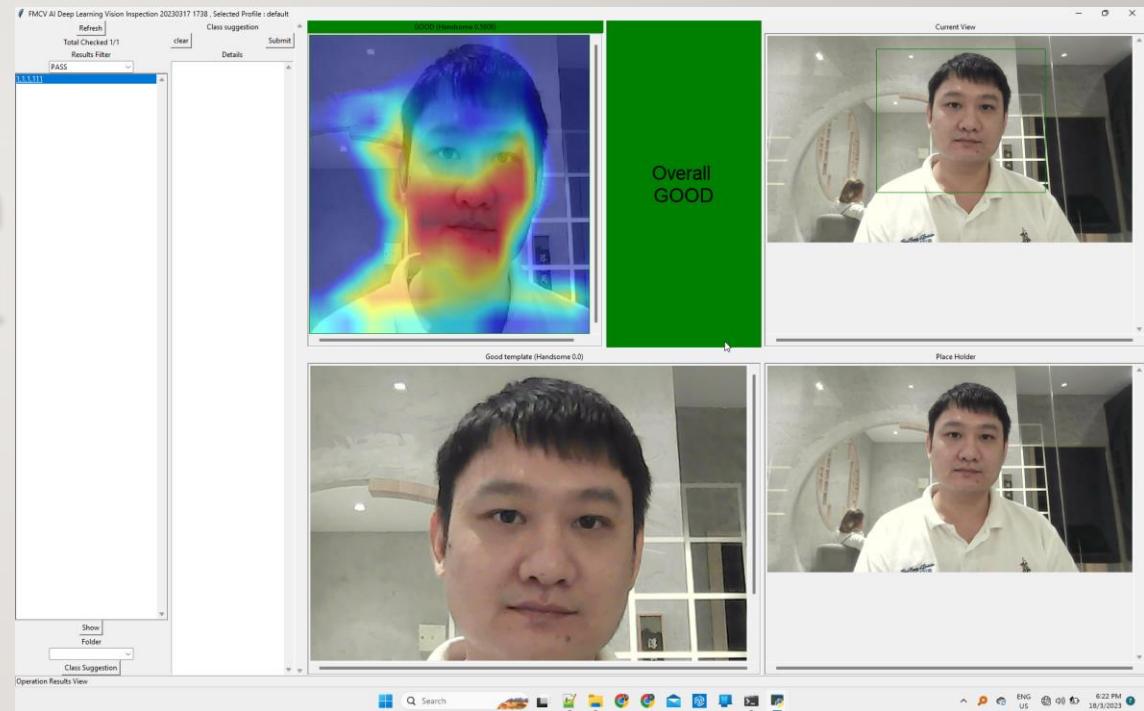
FMC DATA TECH

https://github.com/cyysky/FMC_OEE



FMC Deep Learning Robot Vision

https://github.com/cyysky/FMCV_H



SCUTTLE AGV

[https://github.com/scuttlerobot
/SCUTTLE/](https://github.com/scuttlerobot/SCUTTLE/)



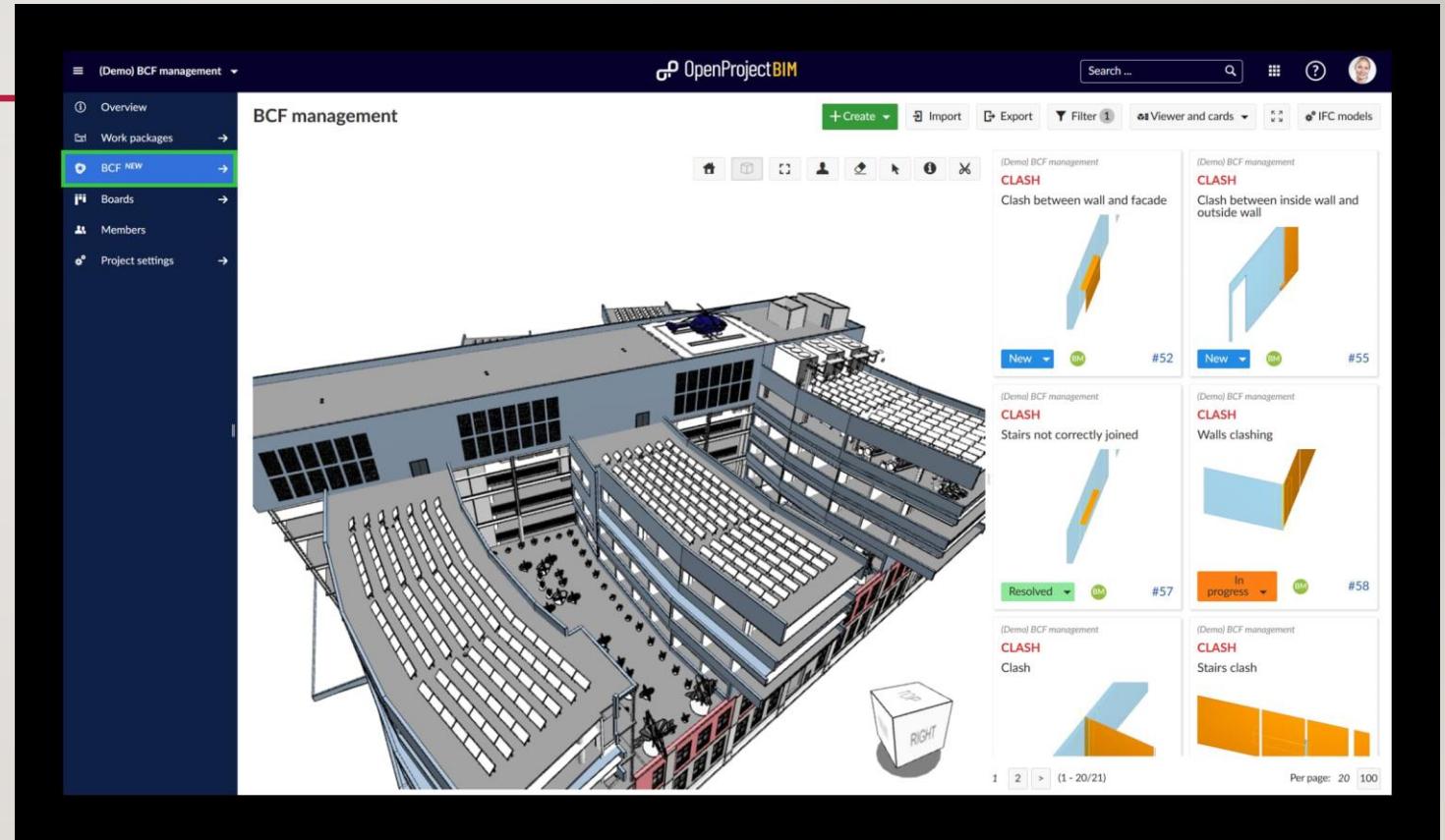
EXAMPLE

A chalkboard with mathematical handwriting. At the top left, there is a graph of a parabola labeled $y = g(x)$. Below the graph, the text "Secant Lines" is written. To the right, the derivative is defined as $f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$. Below this, the function $f(x) = x^2$ is given. The derivative is then calculated as follows:

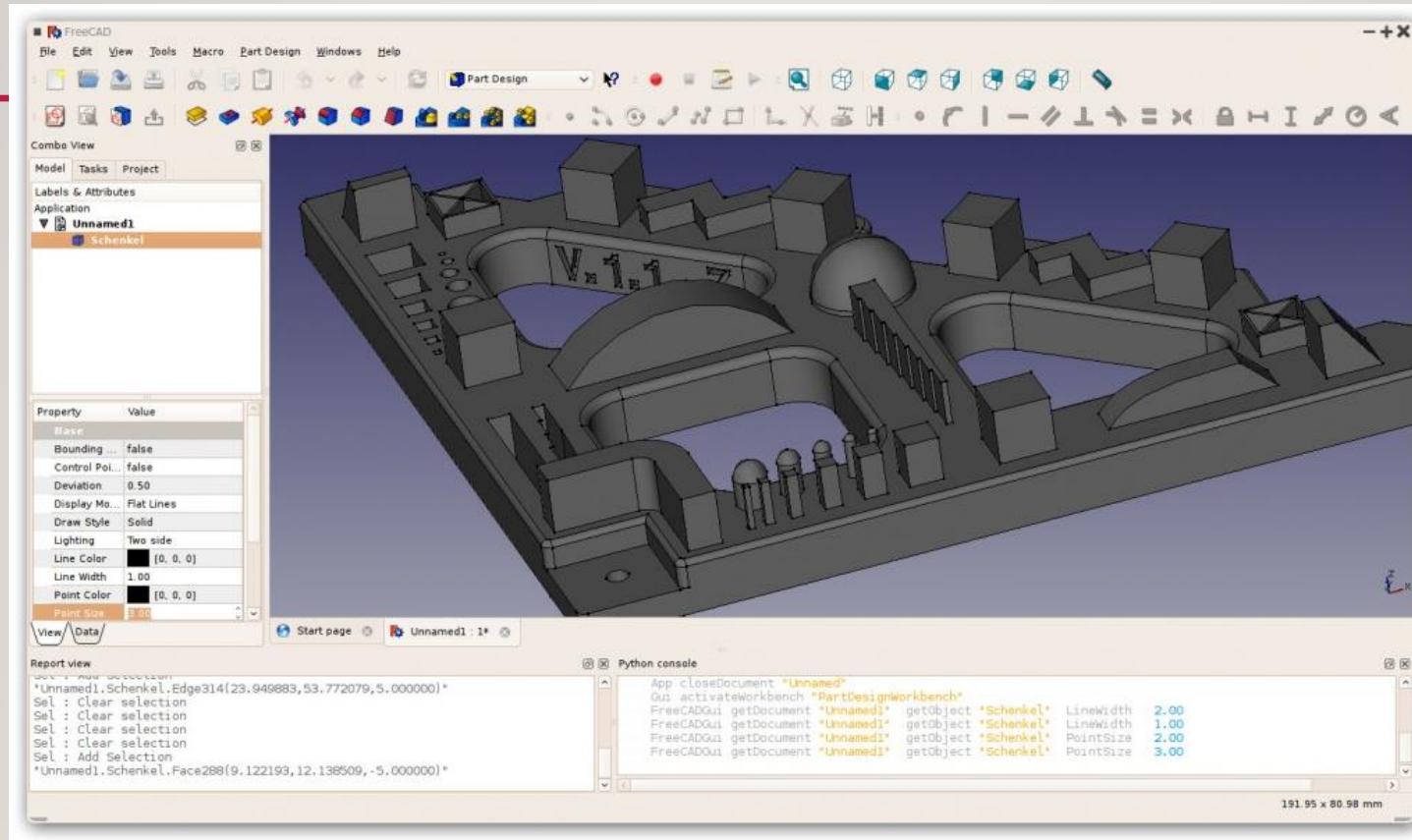
$$f'(x) = \lim_{h \rightarrow 0} \frac{(x+h)^2 - x^2}{h}$$
$$= \lim_{h \rightarrow 0} \frac{x^2 + 2xh + h^2 - x^2}{h}$$
$$= \lim_{h \rightarrow 0} \frac{2xh + h^2}{h}$$
$$= \lim_{h \rightarrow 0} h(2x + h)$$

OPEN PROJECT BIM

- Image source :
<https://www.openproject.org/blog/images/2020/11/BCF-module-1f4a9581.jpg>

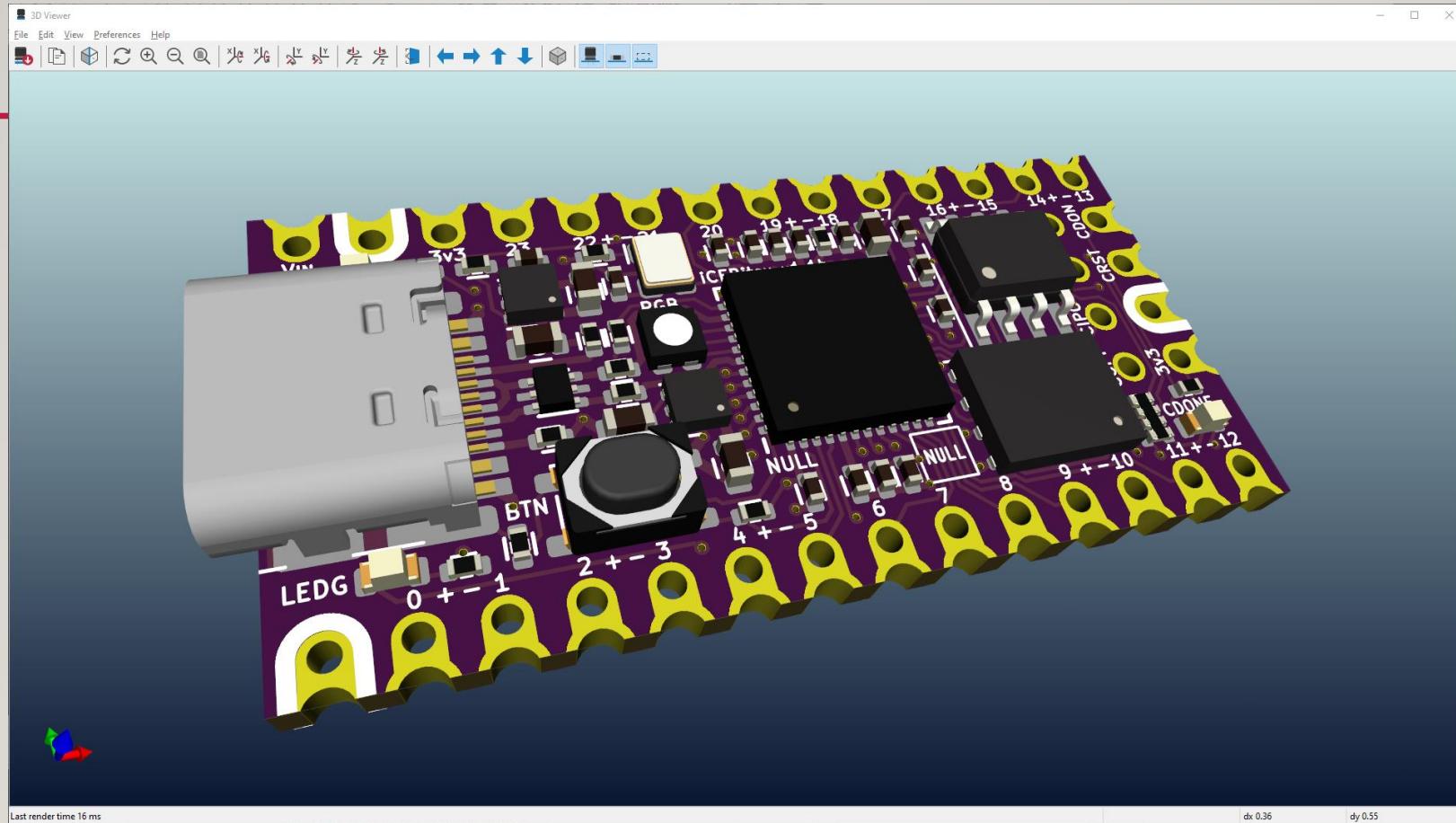


FREECAD



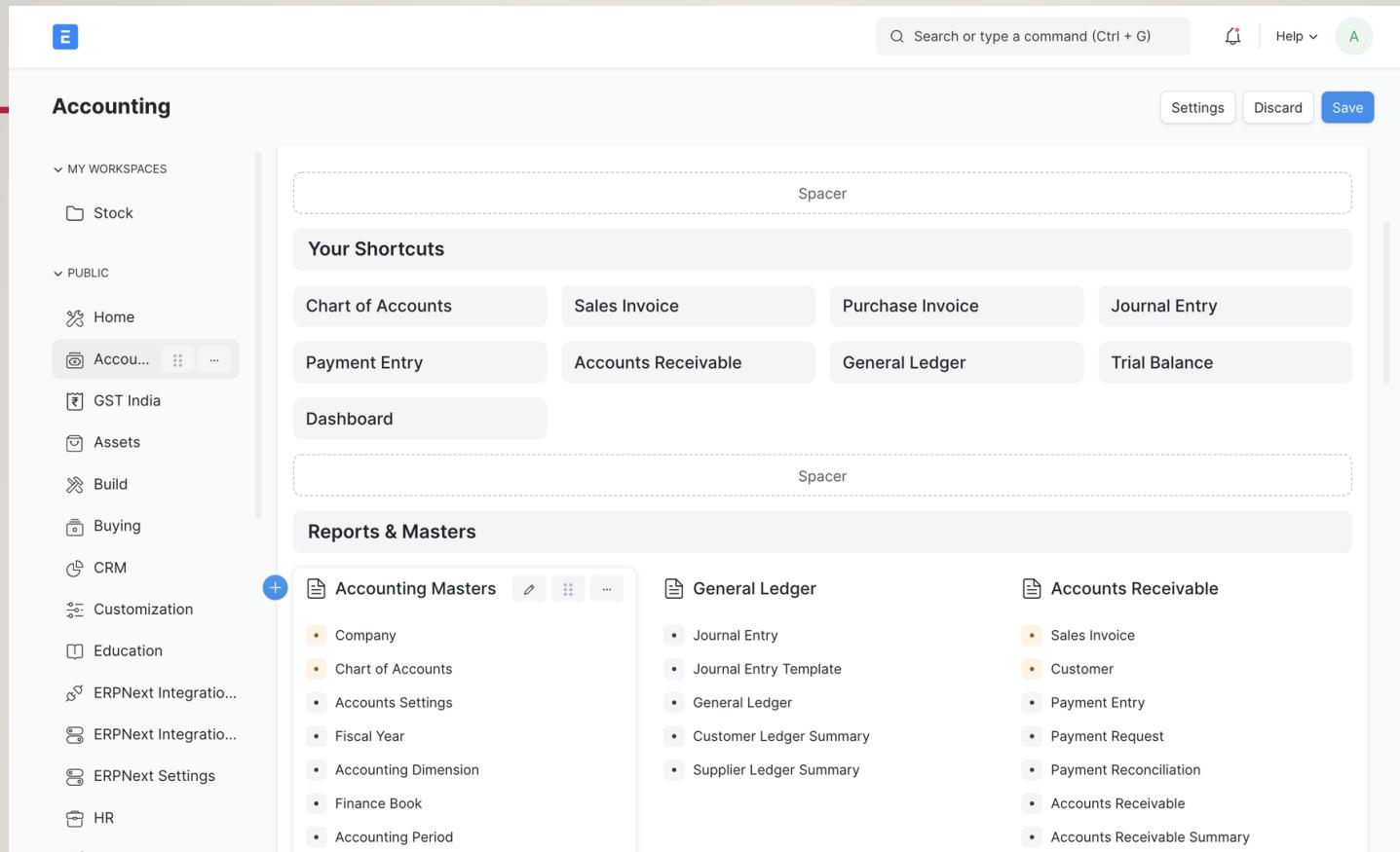
- Image source: https://wiki.freecadweb.org/images/thumb/2/2a/Freecad_default.jpg/1024px-Freecad_default.jpg

KICAD EDA



- Image source: https://www.kicad.org/img/frontpage/kicad_3dviewer.png

ERPNEXT



- Image source:<https://erpnext.com/files/edit-workspace6c0080.png>

THINGSBOARD.IO



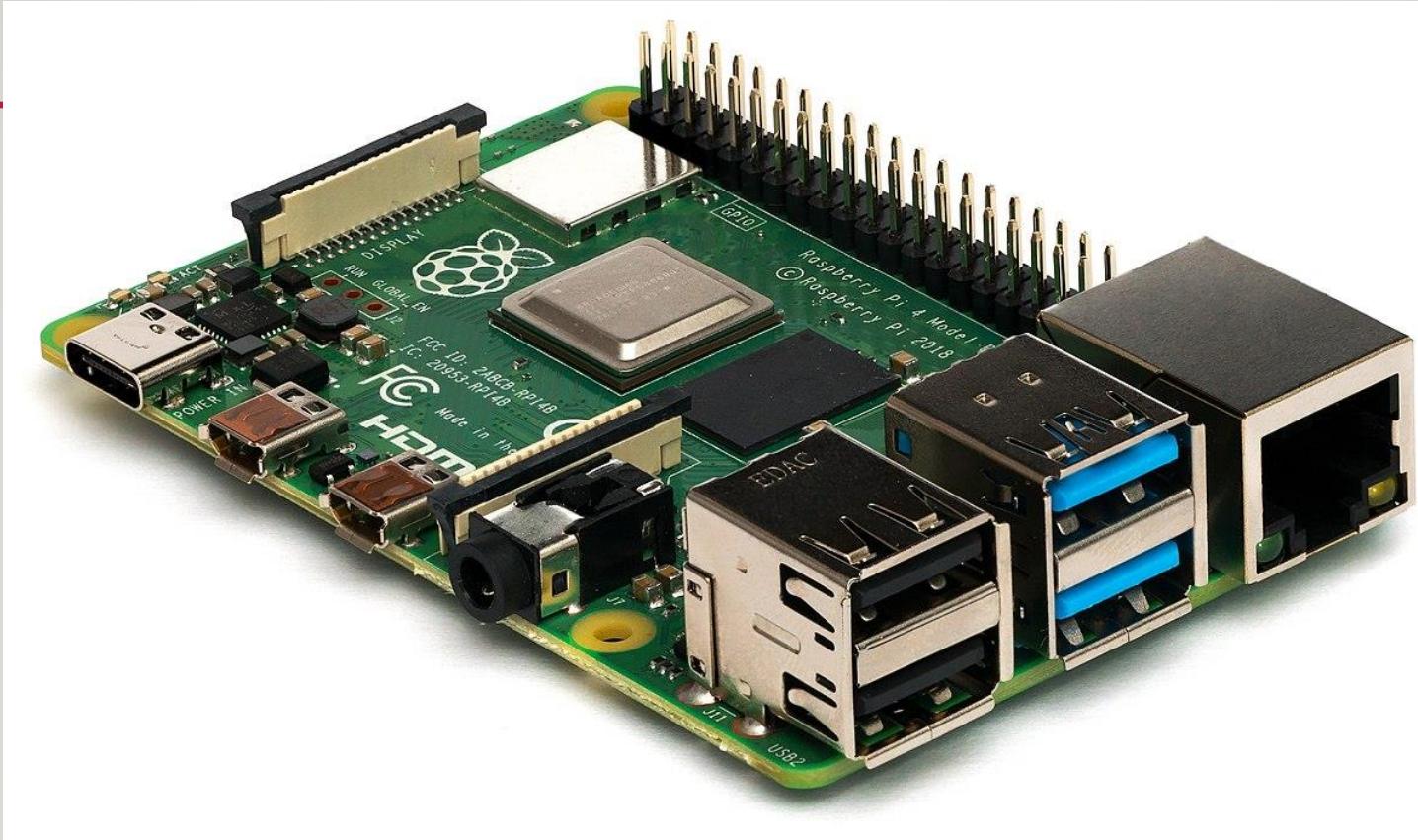
- Image source: <https://thingsboard.io/images/usecases/smart-energy/se4.png>

ROBOT OS



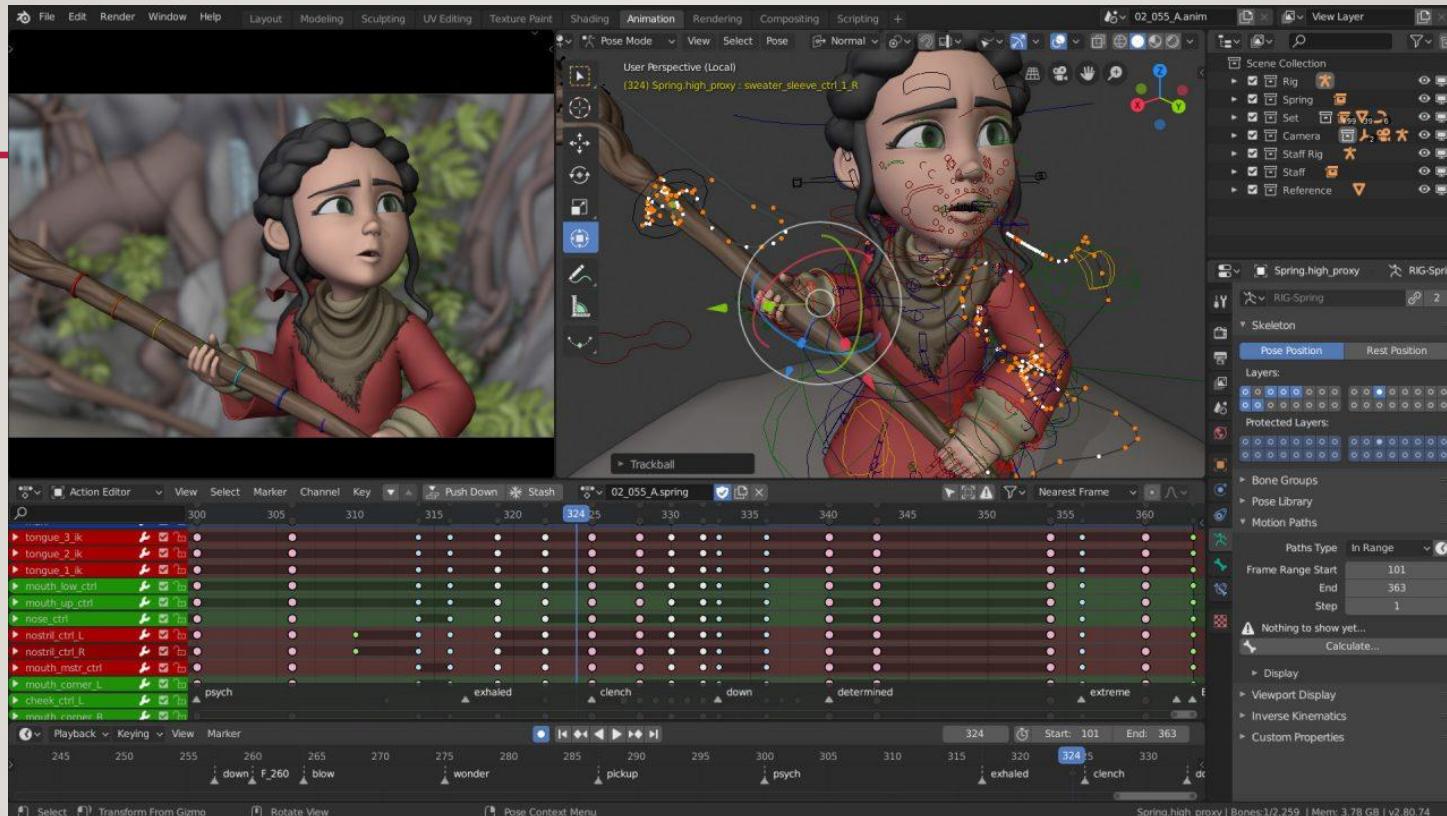
Source : https://docs.ros.org/en/hydro/api/moveit_ros_visualization/html/doc/tutorial.html

RASPBERRY PI



- Image source: https://upload.wikimedia.org/wikipedia/commons/thumb/f/f1/Raspberry_Pi_4_Model_B_-_Side.jpg/1200px-Raspberry_Pi_4_Model_B_-_Side.jpg

BLENDER



- Image source: <https://www.blender.org/wp-content/uploads/2019/07/animation01-1280x720.jpg?x75913>



JOHOR DIGITAL ECONOMY CENTRE OPENS IN DECEMBER 2020

https://www.sinchew.com.my/content/content_2368307.html

<https://www.thestar.com.my/metro/metro-news/2020/11/03/plans-for-digital-enclave-to-spur-growth>

- Xpress Train, Drone And Robotics Zone Iskandar,
- Khairy Jamaluddin (Minister of Science, Technology and Innovation)
- Open source promotion year 2021



OPEN SOURCE PLATFORM - JFEIA - RAFFLES UNIVERSITY MEETUP APRIL 2022



UTM VISIT

- 2022 APRIL





SOUTHERN UNIVERSITY COLLEGE OPEN SOURCE
COMMENTARY APRIL 2022



OPEN-SOURCE SOUTHERN UNIVERSITY MEETUP AND APPOINTMENT AS INDUSTRIAL ADVISORY PANEL @ 2022 APR



Kolej Universiti Selatan (1987) (UK) SJK(C)
PTD 64688, Jalan Sultan Umar, KM 15, Off Jalan Skudai, 81300 Skudai, Johor, Malaysia.
Tel: +607 5596605 Fax: 07-556 3306
Website: <http://www.southern.edu.my>

自強不息 · 厚德載物 · Pembaharuan Diri · Kemuliaan · Semulajadi · Self-Renewal · Virtue · Nature

Ref. No.: SUC/DEE/2022/10L/02
Date: 21/10/2022

Chong Yoe Yat
No. 27, Jalan Harmoni ½,
Taman Desa Harmoni,
Johor Bahru, Johor.

APPOINTMENT AS INDUSTRIAL ADVISORY PANEL FOR (BACHELOR OF ENGINEERING TECHNOLOGY IN ROBOTICS WITH ARTIFICIAL INTELLIGENCE)

This is to appoint Mr. Chong Yoe Yat to serve as the Industrial Advisory Panel for (BACHELOR OF ENGINEERING TECHNOLOGY IN ROBOTICS WITH ARTIFICIAL INTELLIGENCE) of Faculty of Engineering and Information Technology, Southern University College. The period of appointment is TWO (2) YEARS effective from 24th October 2022 – 31st December 2024.

BUSINESS MEET AND EXPLAIN APRIL 2022

- SriMultec Engineering &
- Green Energy Resource (M) Sdn Bhd.



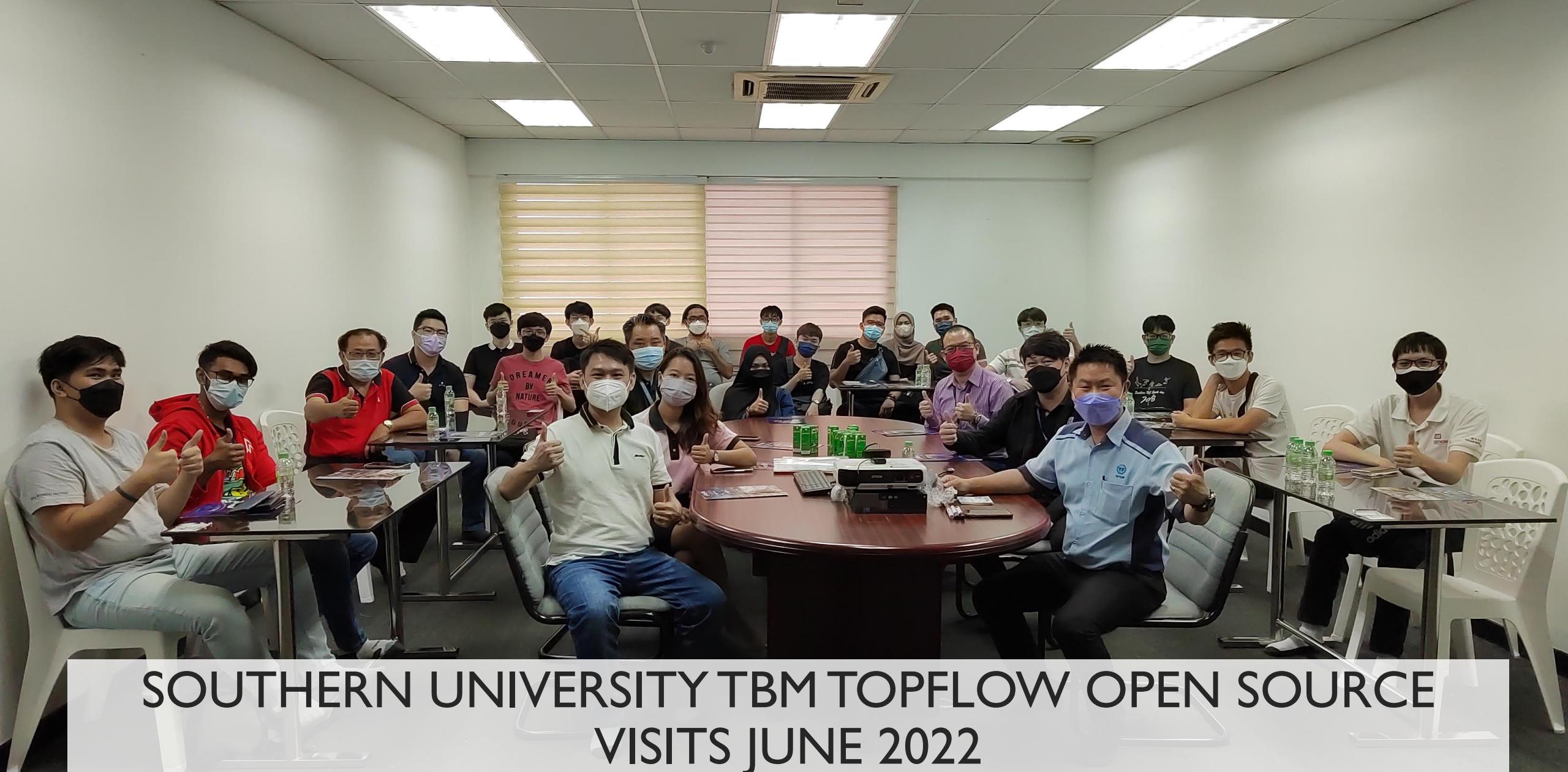


OPEN-SOURCE MEETUP @ APR
2022

OPEN SOURCE PLATFORM WEBINARS

- @ 2022 April





SOUTHERN UNIVERSITY TBM TOPFLOW OPEN SOURCE
VISITS JUNE 2022

VTC SOLUTION SDN BHD OPEN SOURCE VISITS JUNE 2022





Katapult, Wandel, Pintas, Schneider visit 2022 July

Raffles university Innopeak Sdn Bhd Open source promotion 2022 August



企业如何利用开源软件 快速达到工业4.0



主讲人：张如日先生

张如日是人工智能系统&机器视觉专家
Fortune Machine

主讲人：刘哲涵博士

刘哲涵博士是一名首席数据官
澳洲昆士兰大学哲学博



JBCCCI,
JFEIA,
MPMA,
Persatuan Pembina Johor,
Join Seminar
August 24th 2022

長大業報 社區報
編輯：陳秋浩

劉國勝：應改變思維接受新科技 中小企迎工業4.0挑戰

(新山24日訊) 新山中華總商會長劉國勝表示，工業4.0已是全球發展的趨勢潮流，我国中小企业应该做好准备，改变思维接受新科技，迎接挑战。

他说，工业4.0大数据和物联网时代的到来，生产将转向大规模定制模式。因此，传统中小企业必须不断革新，减少劳动力依赖，掌握相关概念及科技，跟上这个大势工业大趋势。

刘国胜今日出席该会举办的“产学合作以及如何应用开源软件达到工业4.0”讲座，并在致词时指出，配合自动化和人工智能发展，业者需建资金和人才。

林國強： 柔南機器廠商公會推動技職課程

林國強受聘時指出，柔南机器厂商公会也将与学府合作推动技职教育课程，在符合工业4.0的需求下，降低劳工短缺问题，整合资源进

才培训基础，了解政府提供的资讯，提升竞争力。

“我们不能安于现状，在迈向工业4.0的步道上要逐步克服难关，转型升级生产质量，让业务永续发展。”

约50位出席者参与这场座谈会，包括柔南机商公会、柔南企业家商会、柔江水业、马西西里集团有限公司柔佛分会会长戚威昌，以及柔佛机器厂商公会会长陈国强也出席此活动。

其他出席者，尚有：新山中華总商会第二副会长曾华俊、总秘书处来财和资讯工业组主任张凯雄，以及盛世销售和市场部高级执行员符永劲、主讲人张如日和刘哲涵等人。

出席者通过讲座会了解工业4.0的概念和科技。(编者报导)

刘国胜(左五)赠予纪念品
柔南機器廠商公會推動技職課程

他说，工业4.0是一套依据大数据来操作的系统，业者不仅要停留于代工行销阶段，需要设定完善方法并研发创新产品，降低成本，强化企业领导知识层面的提升，相信仍能迎头赶上。(编者报导)





UTHM and TSH Company Open source promotion 2022 September and October



20230829 Artificial Intelligent Manufacturing Trend Workshops



20230823 ESG Institute and APDAM Open Source Talks at UPM



20240108 APU Software Engineering Employees and Employment Talk



Certificate of Appreciation

This certificate is awarded to

Mr. Chong Yoe Yat

Director

Fortune Machine Computer

As speaker at

Employees and Employment Trends Talk

11th January 2024

A handwritten signature in black ink.

Head
School of General Studies

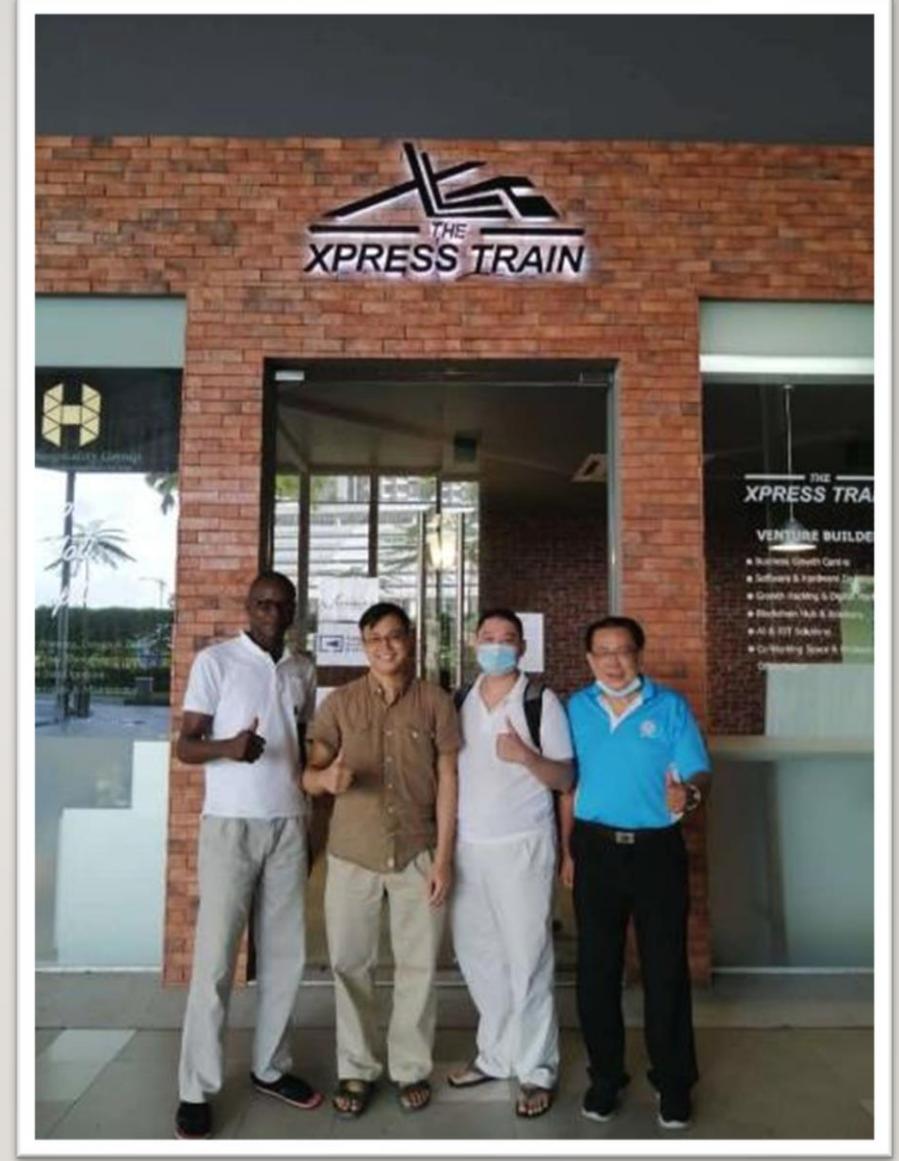
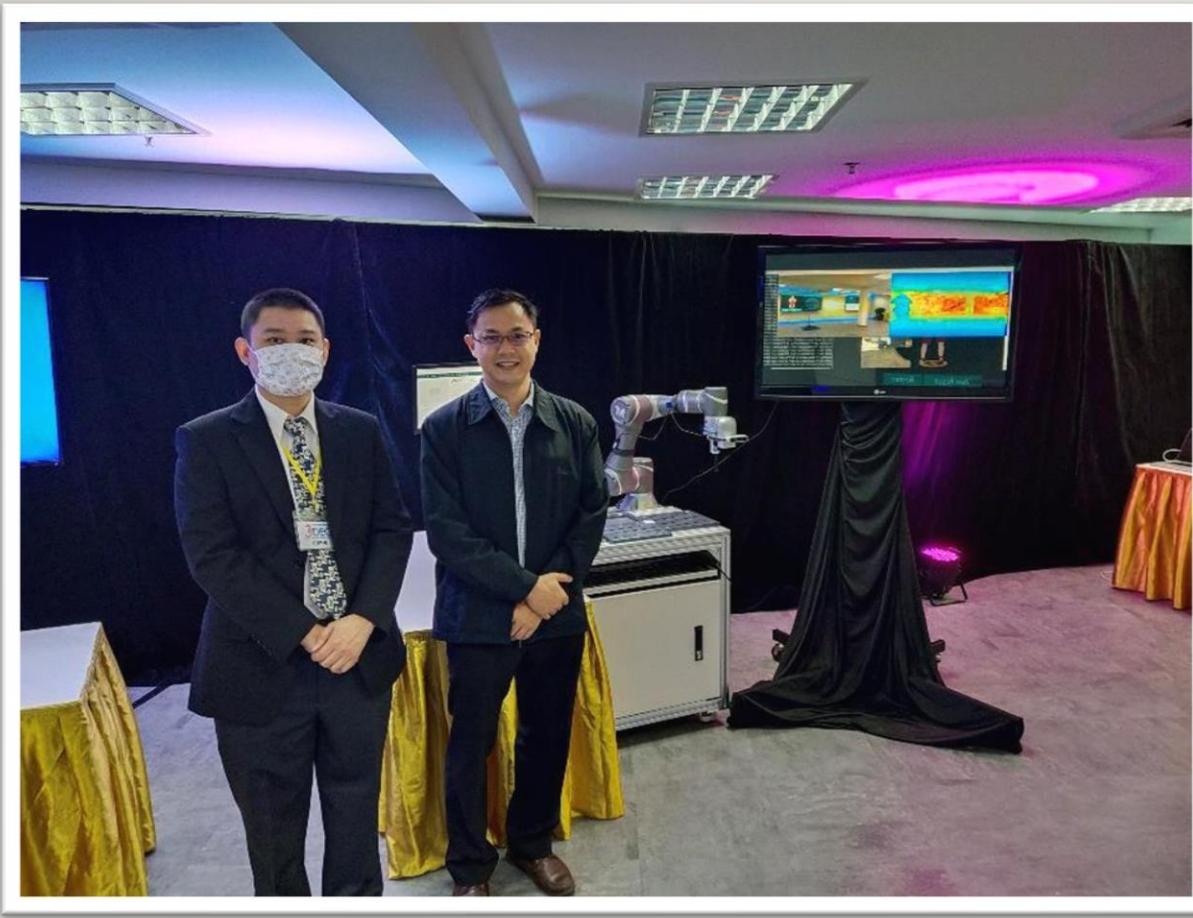
A screenshot of a video player window from YouTube Premium. The video title is "2000 Iterations". The main frame shows a red and black robotic arm with a gripper, performing tasks on a white rectangular block on a checkered floor. A text overlay in the center of the video frame reads: "good enough to even work in the real world after all! And if the knowledge from here". At the bottom of the video frame, there is a caption: "Source: [Schwarke and Klemm et al. 2023] This Curious Robot Should Be Impossible!". The video player interface includes a play button, volume controls, and a progress bar. To the right of the video frame, there is a sidebar with user information: "yoeyat" (1.5M subscribers), "Two Minute Papers" channel, and a Microsoft Teams sharing screen indicator. On the far right, there are two circular profile pictures with initials: "CY CHONG SHENG YAT" and "CK CHAN KAH KIN". The background of the slide shows a blurred view of a classroom or lecture hall with students seated at desks.

VARIOUS COLLABORATIONS



DiTAC Member for Cyberport
@2021

The Xpress Train @2020



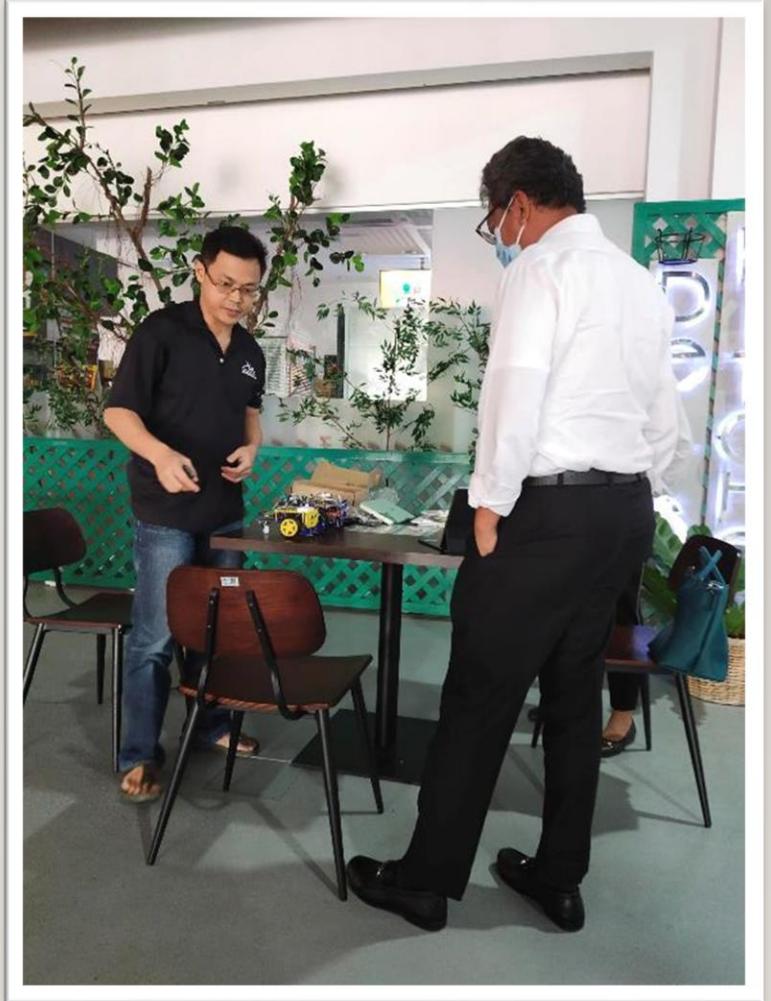
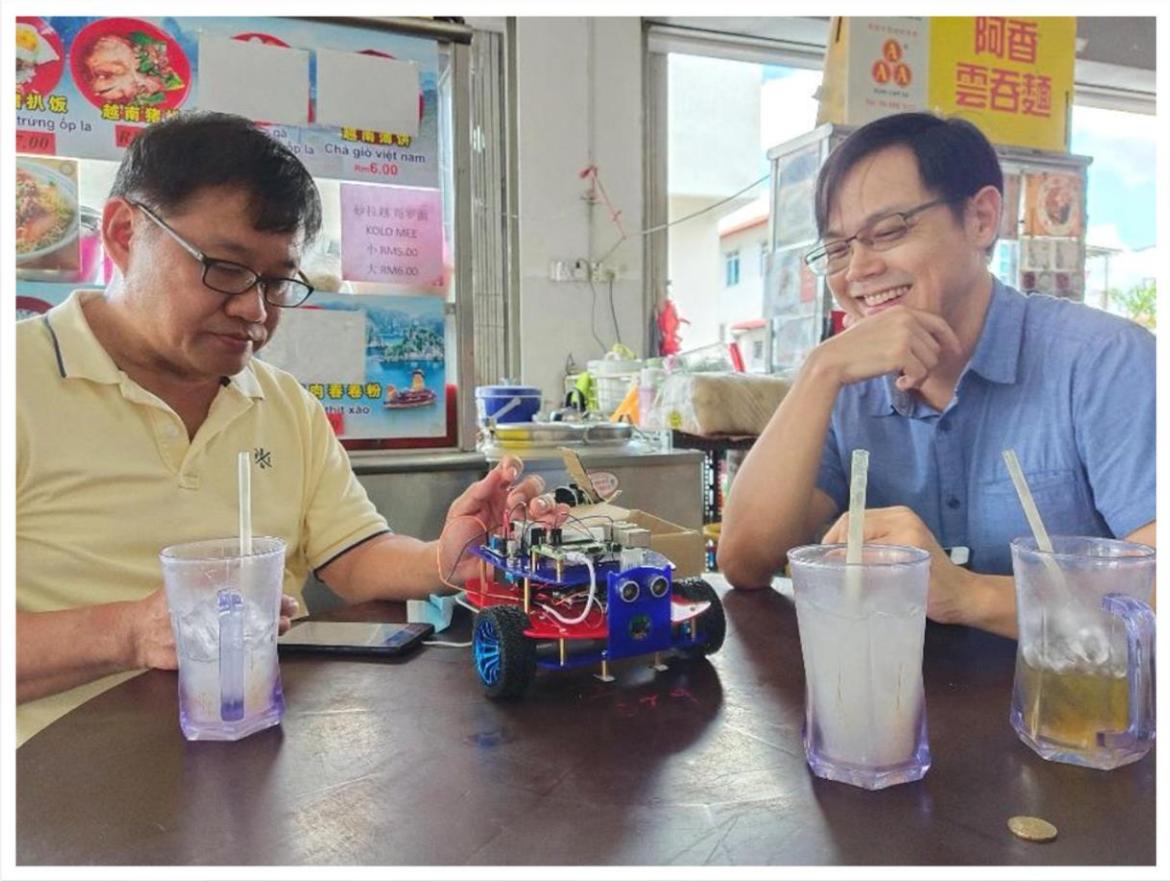


Wandel Engineering
@2020

Scuttle
@2021



Crest, The Xpress Train, FMC, Micromesh Education Program @2021





Dr Sasa, Raffles University & JIOS
@ 2020

ISI, Kenneth HRDF, DR Kah Seng
@ 2021





SOLO LABELLER Mr Cheong
@ 2021



**Prosper Tech Mr Tham
@ 2021**



The image is a wide-angle aerial photograph of a park and surrounding urban area. In the foreground, there's a large, well-maintained green space with various paths, a central fountain, and a prominent white dome-shaped structure. To the left, a dense cluster of residential houses with red roofs is visible. To the right, a road with several cars and a parking lot are seen. In the background, a vast city skyline with numerous skyscrapers under a blue sky with white clouds stretches across the horizon.

Thank You!



Fortune Machine Computer Contact

Mr Chong Yoe Yat

+60127939038

Links

<https://www.fmcv.my>

<https://fortune-machine-computer.business.site/?hl=en>

<https://www.facebook.com/fortunemachinecomputer/>