

Tech 4 Good 2025 Challenge

Concept Briefing

Vitrox⁺

UTAR
UNIVERSITI TUNKU ABDUL RAHMAN

Agenda

1. Competition Overview
2. Timeline
3. Registration
4. Awards and Prizes
5. Overview of Tracks
6. Tips for You
7. QnA

T4G Overview

A national-level invention competition in Malaysia since 2023.

Organized By



Co-Sponsored By



- Develop practical experience in applying engineering, technology, and science knowledge through prototype building.
- Gain Certificates and Medals which add valuable credentials to your academic profile.
- Receive mentorship and invaluable guidance from industry engineers (coaches) to refine your prototype. *Category 1 (Secondary School)*
- Stand a chance to secure award scholarship to further tertiary education at ViTrox College. *Category 1 (Secondary School)*



As of 2024, nearly 700 participants from East and West Malaysia have participated in T4G.

64.2%

Secondary
School Students

35.8%

Tertiary
School Students

Timeline



Registration & Proposal
Submission Period

15th Jan 2025 - 15th March 2025



Evaluation Period

16th March 2025



Finalist Announcement

12th April 2025



Workshops

May - June 2025



Grand Finale

26th July 2025

Physical at ViTrox Campus 2.0,
Batu Kawan Penang

**Latest by 11.59PM,
14 March 2025**

- Registration Link & Proposal Submission Link are **different**, refer [WEBSITE](#)

Registration Google Form

Could you let us know which topic you would prefer to focus on in the workshop? *

You may choose more than one.

- AI
- Machine Vision
- IoT
- Robotic and Automation
- Mobile Application

If you have a different preference for the workshop topic, please specify.

Your answer

Which workshop venue do you prefer? *

You can choose more than one.

- Physical in ViTrox (Batu Kawan, Penang)
- Physical in UTAR (Kampar, Perak)
- Both physical venues are acceptable
- Virtual

Indicate your preferences

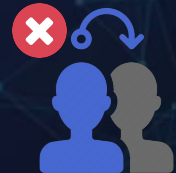
Please note that the workshops selected are NOT guaranteed.
Final workshop arrangement will be announced to Finalists later.

Registration

If I'm graduated from secondary school, waiting to be enrolled to college / university?

CATEGORY 1	Secondary School	SPM : Form 1 to Form 5 IGCSE: Year 8 to Year 11 UEC : Junior & Senior High 1,2,3
CATEGORY 2	Tertiary School	Undergraduate, including STPM, A-level and Foundation

- 1) Registration & Submission Period: 15 January 2025 to 15 March 2025 (latest by 11.59PM, 14 March 2025)
- 2) Each team must consist of **THREE (3)** students.
 - Each student can register for only ONE (1) team.
 - Each team can register for only ONE (1) track.
 - There is no limit on the number of teams a school can register.
 - Registered team is **not allowed to change** the group members after proposal submission.
- 3) No registration fee is required.
- 4) Language: English or Bahasa Melayu



Awards & Prizes

PARTICIPANT	Successfully submitted proposal	Certificate of Participation
FINALIST	Top 8 teams from each track who entered Grand Finale	Certificate of Achievement
WINNER	Top 3 teams from each track	Certificate of Winner + Medal



Each track have Champion, First Runner-up and Second Runner-up respectively.

Awards & Prizes

ViTrox College STEM Excellence Award









Sponsored by ViTrox College, **Category 1 winners** will be awarded the ViTrox College STEM Excellence Award, an award scholarship to honor and recognize outstanding talents in Science, Technology, Engineering, and Mathematics (STEM).



			
CATEGORY 1 Secondary School Level	RM3,000 / individual tuition fee waiver under ViTrox College STEM Excellence Award	RM2,000 / individual tuition fee waiver under ViTrox College STEM Excellence Award	RM1,000 / individual tuition fee waiver under ViTrox College STEM Excellence Award

Tuition fee waiver (scholarship) for INDIVIDUAL. **Not cash award.**

Track overview

<p>Agriculture</p> 	<p>Artificial Intelligence (AI)</p> <p>Internet of Things (IoT)</p> <p>Mobile Application</p>
<p>Healthcare</p> 	    
<p>Manufacturing</p> 	<p>Machine Vision</p> <p>Robotic & Automation</p>

Track overview

Agriculture



Food Security



Climate Change



Limited Resource

Manufacturing



Sustainability

Productivity

Resource Efficiency

Track overview

Agriculture



Aging
Population



Rising
Costs



Unequal access
to quality care

Healthcare



Improve
Accessibility



Enhance
Affordability

Manufacturing

Track overview

Agriculture



Supply Chain Disruptions



Inefficient Use of Resources



Increasing Demands for Sustainability

Healthcare



Enhance Productivity



Minimize Environmental Impact



Improve Cost-efficiency

Manufacturing

Agriculture

Artificial Intelligence (AI) & Machine Vision

- Precision Farming
- Yield Prediction
- Agricultural Chatbots
- Crop Quality Analysis
- Pests and disease early detection
- Fruits grading and sorting system



Agriculture

Internet of Things (IoT)

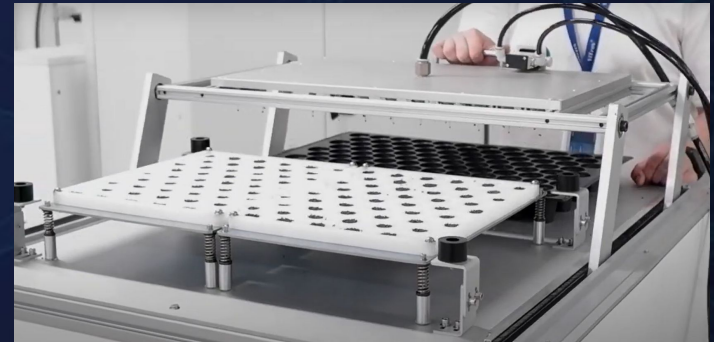
- Environmental Sensors
- Soil Monitoring
- Smart Irrigation Systems
- Livestock Monitoring



Agriculture

Robotic & Automation

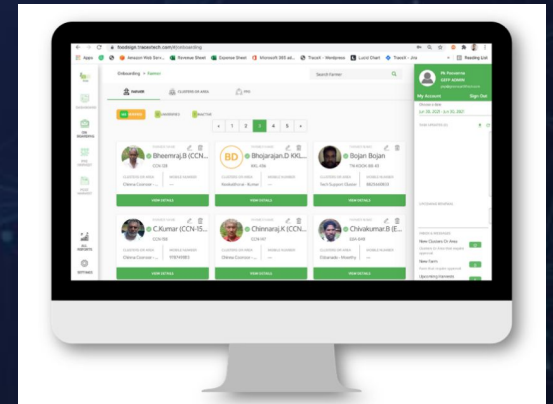
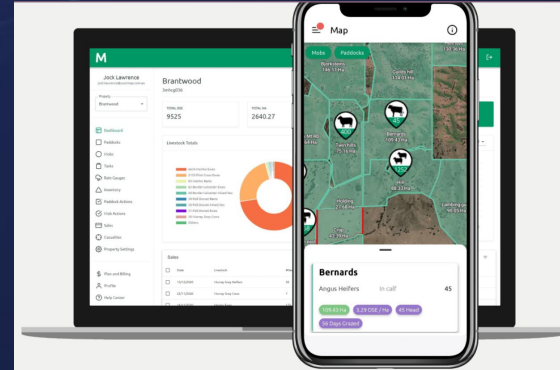
- Autonomous Tractors
- Fruit Picking Robots
- Transplanter
- Sprayer



Agriculture

Mobile Application

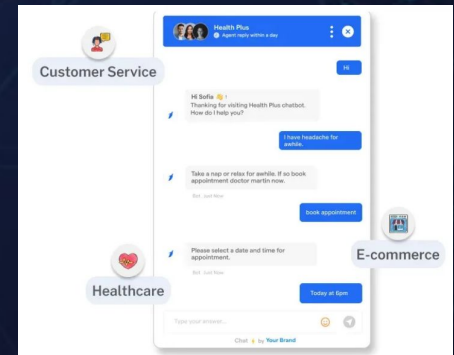
- Farm management Apps
- Drone Control Apps
- Market Connection Platforms



Healthcare

Artificial Intelligence (AI) & Machine Vision

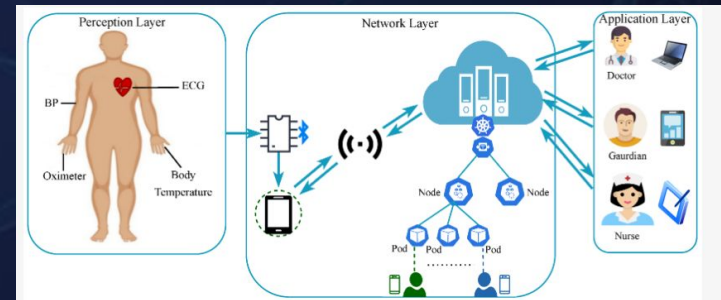
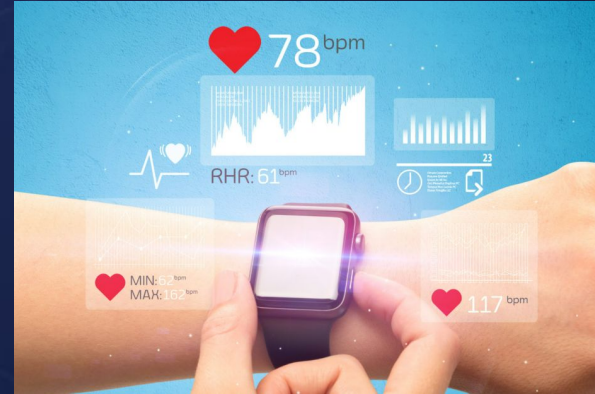
- Disease Diagnosis
- Virtual Health Assistants
- Predictive Analytics
- Medical Imaging
- Skin Cancer Detection
- Surgical Assistance



Healthcare

Internet of Things (IoT)

- Wearable Health Devices
- Remote Patient Monitoring
- Smart Hospital Beds



Healthcare

Robotic & Automation

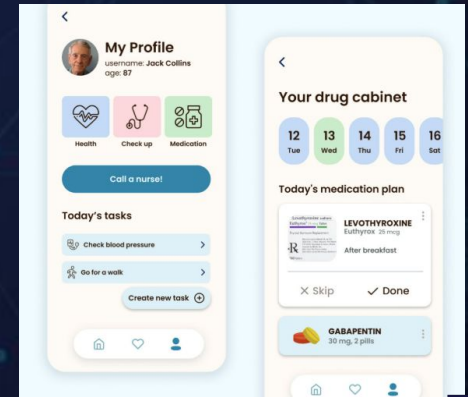
- Healthcare Assistance
- Robotic Surgery
- Rehabilitation Robots
- Healthcare Administration



Healthcare

Mobile Application

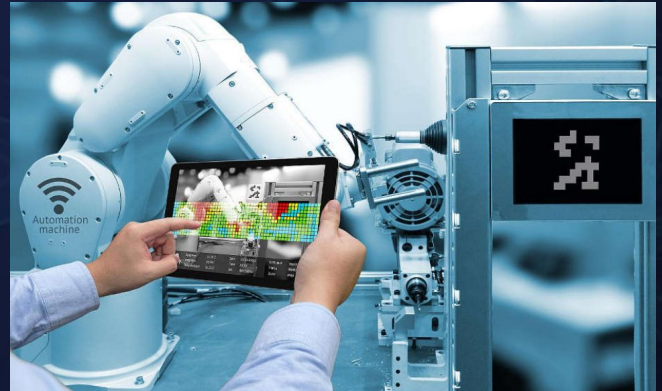
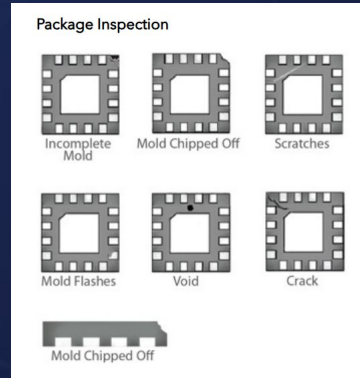
- Telemedicine Apps
- Health Tracking Apps
- Medication Reminder Apps



Manufacturing

Artificial Intelligence (AI) & Machine Vision

- Energy Optimization
- Predictive Maintenance
- Quality Control
- Demand Forecasting
- Assembly Line Inspection
- Surface Inspection



Manufacturing

Internet of Things (IoT)

- Smart Factories
- Asset Tracking
- Energy Monitoring



Production Monitoring Dashboard



Energy Monitoring Dashboard

Manufacturing

Robotic & Automation

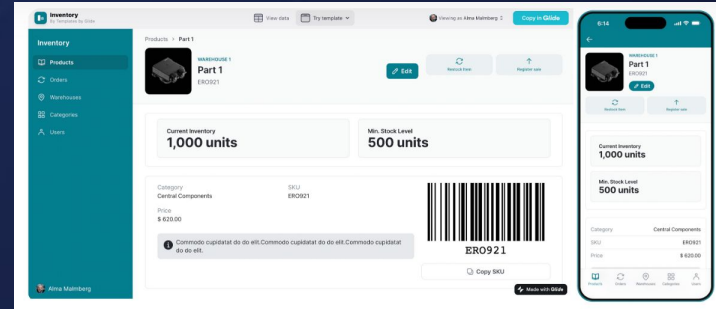
- Collaborative Robots (Cobots)
- Automated Material Handling



Manufacturing

Mobile Application

- Factory Monitoring Apps
- Inventory Management Apps
- Remote Equipment Control



QnA Session

How to start?

Tips for you!

1. Research the Track and Technology You Wish to Explore
2. Find Real-World Cases for Deeper Understanding
3. Analyze the Pros and Cons of Existing Technology
4. Collaborate and Ideate with Your Team
5. Understand the End-User Perspective
6. Focus on Innovation and Creativity
7. Write and Submit a Comprehensive Proposal



Tips for you!

You can obtain the Evaluation Rubric in the Info Pack page 8

A) PROPOSAL FORMAT

Proposal Guideline &
Template

[CLICK HERE](#)

Proposal Evaluation Rubric

[CLICK HERE](#)

LANGUAGE

English or
Bahasa Melayu only

Tips for you!

Find your team members and register first!



[REGISTER NOW](#)

Tips for you!

1) Research the Track and Technology You Wish to Explore



Tips for you!

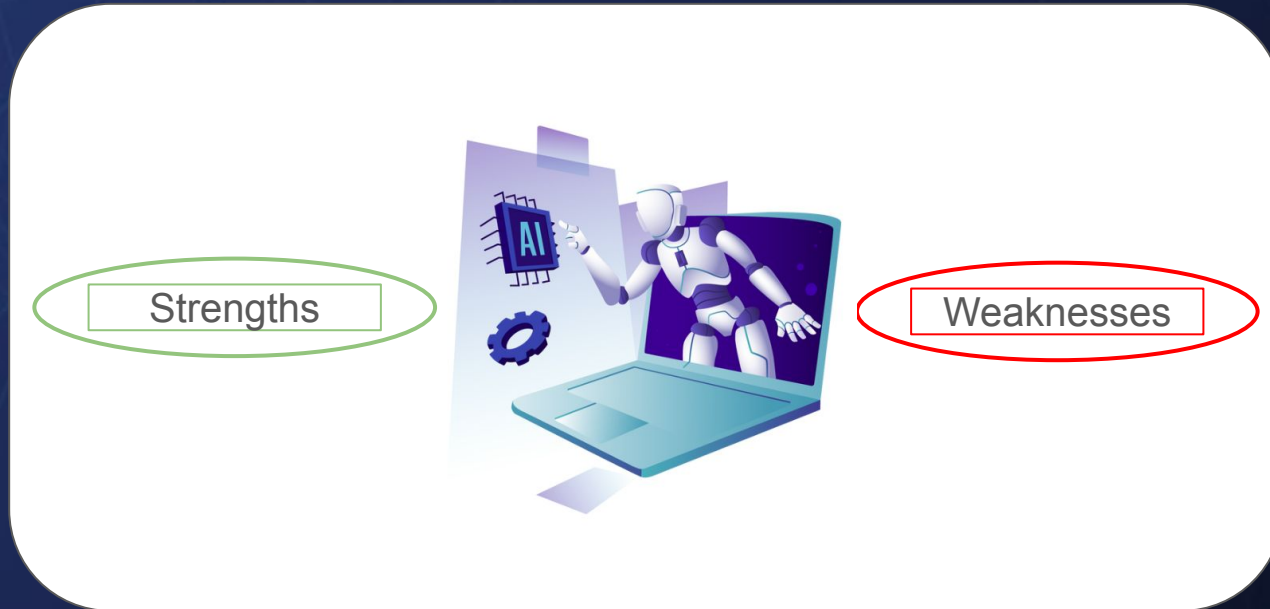
2) Find Real-World Cases for Deeper Understanding

Limitations 



Tips for you!

3) Analyze the Pros and Cons of Existing Technology



Tips for you!

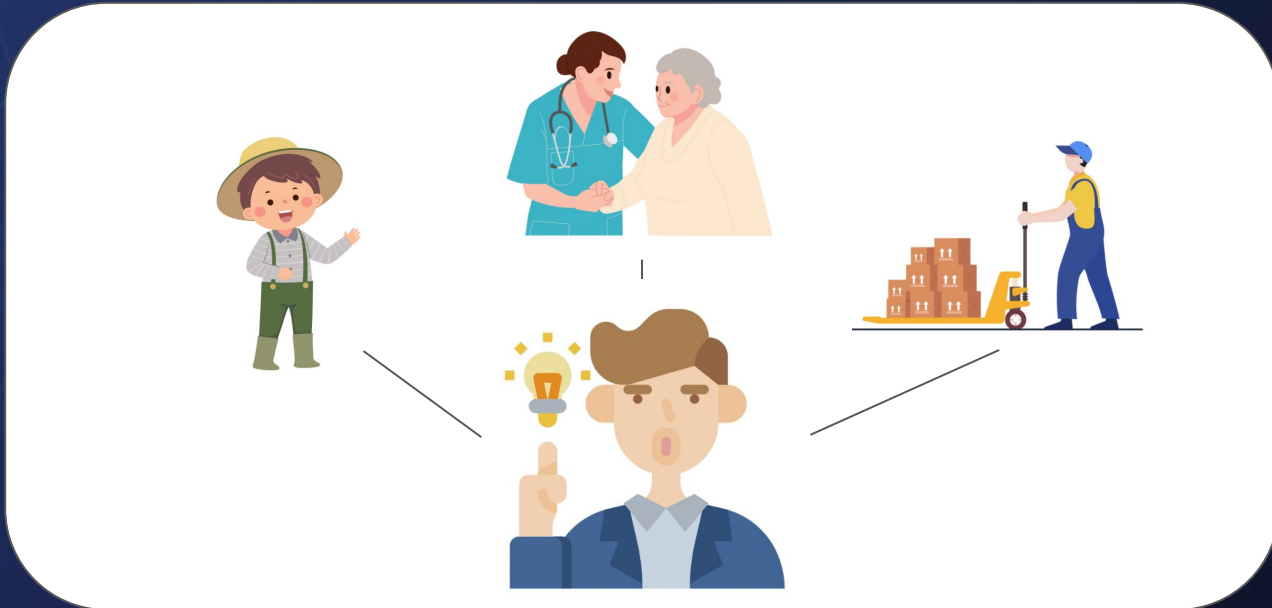
4) Collaborate and Ideate with Your Team



- Productivity
- Cost
- Manpower
- Efficiency
- Sustainability

Tips for you!

5) Understand the End-User Perspective



Tips for you!

6) Focus on Innovation and Creativity



Tips for you!

7) Write and Submit a Comprehensive Proposal



1. Introduction
2. Background Studies
3. Aim and Objectives
4. Methodology



Tips for you!

Recorded session will be put inside our website, if you got any extra questions can proceed to contact us, but before that do download the Info Pack in the website and read it through first.

26 DAYS TO DEADLINE 



SCAN ME



See you and All the best!