



ISSUE 5 • JULY 2021

# THE TRIPLE HELIX

TECHNOLOGY APPLIED TO MARKET



## Building Talent of The Future

Over the course of the last nine years, CREST has worked in tandem with university partners and key industries for its Talent Development initiatives.

To date, we have trained more than 8,000 graduates from over 30 universities and with the support of more than 150 industry partners, we have nurtured a pool of domain experts and equipped students with industry-relevant knowledge and skills for the future of work. Our programs have also produced 250+ industry-trained MSc and PhD students and postgraduate researchers.

**CREST  
NEWSLETTER**

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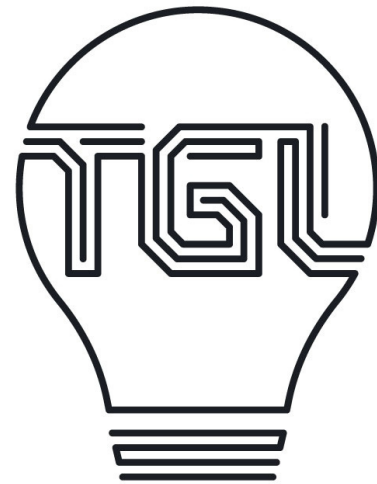
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# BUILDING TALENT OF THE FUTURE

TheGreatLab (TGL), is an industry-driven collaborative Talent Development Program, championed by CREST with the aim of producing industry-ready graduates, technopreneurs and future scientists.

As CREST focuses on growing R&D in key E&E clusters through Industry-Academia collaboration, the Talent Development programs are streamlined to nurture undergraduate talent with relevant skills and experience prior to graduation.

The TGL program series comprises of the TGL Youth Program and the TGL Industry Talent Program.



# TheGreatLab

• Where Greater Solutions Are Created •

## TGL YOUTH PROGRAM

The TGL Youth Program aims to cultivate students' interest and drive passion towards enrolment in STEM education.

The program exposes high school students to real life working experience through company visits, industry talks and mentoring session with industry partners.

The program nurtures technical and soft skills among high school students in areas of STEM through bootcamps, technical workshops and TGL design competition.

To date, 3,700 students from 179 high schools have participated in the program and have been exposed to industry-relevant knowledge, skills and career opportunities in the E&E industry.





# TGL INDUSTRY TALENT PROGRAM



The customisation of industry-relevant talent programs to specific clusters and competency domain areas is an important element in bridging the gap between the learning experience in classrooms with early exposure to industry-relevant skills and competencies through workshops, bootcamps, industry projects, technical training and lectures by industry experts.

To date, more than 8,000 undergraduates from more than 30 universities have been trained and supported by more than 150 industry partners.

In addition, 5 new start-ups were launched as a result of successfully completing industry challenges through the TGL program.

## THE CEO'S MESSAGE

**JAFFRI IBRAHIM**



We have come to the second half of 2021! Together we are adapting to the new norm and reshaping the way we operate to be more innovative, flexible and responsive while consistently delivering value to the ecosystem. I am proud of the resilience shown by our industry partners, the community and also our team during these challenging times and I remain positive that we will emerge stronger than before.

Whilst CREST is synonymous with collaborative R&D, one of our key focus areas includes the development of talent for the ecosystem.

In the last nine years, CREST, together with the government, industry and academia have played a vital role in bridging the talent gap for Malaysia.

This includes steering the curricular of the Institutes of Higher Learning to ensure the education curriculum aligns with industry needs and is agile enough to keep E&E talents adopting new trends.

In addition, we continuously look to create a sustainable pipeline of talent with industry partners, particularly as digitization has led to an influx of new job creations and a corresponding demand for new skills.

Therefore, it is befitting that this issue of Triple Helix pays special emphasis on our talent development efforts to date. Read about the initiatives conducted by our talent team in 2021 and find out more about CREST's TheGreatLab initiatives and its impact on the talent ecosystem in Malaysia.

Get to know our community members and their business in our "Community Highlights" section and read about what CREST has been up to, since the start of the year.

As we continue to operate in unprecedented times with the economic, social and political impact of Covid-19, allow me to take this opportunity to extend my support as you continue your efforts to build back stronger.

I wish you all the best. Stay safe!

Jaffri Ibrahim

# NEWS FROM THE COMMUNITY

## CREST PLACE TENANT: SYNVue

We are Synvue Sdn. Bhd, an engineering firm operating at CREST Place, since June 2017. Our company focuses on automation and machine vision systems, product design and industrial training.

At Synvue, we offer solutions in engineering, consulting, manufacturing, sales and service and we specialize in automation, national instruments applications & designs, machine vision, test systems development & PCB Design, AI, IoT, embedded systems and technical & industrial training.



Always looking ahead, we have the passion to expand in multiple areas. These include expanding our workforce and reach into multiple domains by 2025 and to focus on product and applications development that are in line with Synvue's expertise.

**SYNVUE'S DIRECTION FOCUSES ON GROWTH AND HOW EACH MEMBER OF THE TEAM CAN CONTRIBUTE TO THE ORGANIZATION. WHILE DOING SO, WE AIM TO BE THE PREFERRED COMPANY IN MALAYSIA FOR AUTOMATION AND TO EXPAND OUR FOOTPRINT IN SOUTH EAST ASIA TO COUNTRIES SUCH AS SINGAPORE AND VIETNAM.**

At Synvue, we believe that many opportunities can be derived from collaborating with others. Through our collaboration with CREST, we have formed solid partnerships with multiple stakeholders and we look forward to further making our contribution in talent development by playing an integral role to shape the talent pool of the future.





# NEWS FROM THE COMMUNITY

## DF AUTOMATION & ROBOTICS

**Provide us with a brief profile of the founding team. How did you become interested in your field which resulted in starting up the company?**

DF Automation & Robotics Sdn Bhd was founded in 2012 by Dr. Yeong Che Fai, Ricky Yap Wee Yang and Mr Tan Ping Hua. In addition to being a co-founder of the company, Dr Yeong is an Associate Professor at Universiti Teknologi Malaysia. Both Ricky and Tan were students of Dr Yeong back in 2004. The trio share a passion for robotics and have previously represented Malaysia in ROBOCON, a key robotics competition held locally.



**Share with us a brief background of your company.**

DF Automation is a technology company that specialises in designing, manufacturing, servicing and marketing Autonomous Mobile Robot (AMR) and Automated Guided Vehicle (AGV) systems for numerous industrial and commercial use. AMR/AGV is a mobile robot that is able to move on its own whilst carrying heavy loads from one place to another. These robots play a key role in helping factories and companies reduce their reliance on labor and also help to improve efficiency on indoor material handling.



**"WE ASPIRE TO BE THE LEADING AMR/AGV MANUFACTURER AND SYSTEMS PROVIDER. OUR MISSION IS TO PROVIDE COMPANIES WITH EFFICIENT AND AFFORDABLE AMR/AGV SOLUTIONS THAT WILL FURTHER ENHANCE THEIR BUSINESS OUTPUT"**

**- DR YEONG CHE FAI**

At DF Automation, we have a strong team with over 20 years of experience in designing AGV/AMR related products. We have an in-house R&D team committed to design and develop new products with latest technology and a project team that is dedicated to provide full solutions to customers. Some of our products include the NavWiz software, DFleet, a Fleet Management System, Zalpha, Titan and Zeta.

All these products were developed in-house and DF has filed more than 10 intellectual properties.

To date, we have customers ranging from electronics, F&B, automotive, healthcare and warehouse sectors. Our products are exported to Singapore, Thailand, India, Europe and Mexico.



### **What are your plans, moving forward?**

Moving forward, we will continue to innovate and provide AMR/AGV solutions for different industries. We envision our company being the leading robotics organisation in the world and chart a piece of history as the first Malaysian company to do so.

### **Testimonials or quotes about collaborating with the CREST community.**

CREST has vast experience in the areas of research and development and commercialisation. They have an amazing network in their portfolio and have connected us with university researchers and relevant collaborators in addition to establishing government linkages where we were able to discuss and set the direction for policies in the technology and robotics space.

### **Call for collaborators/partners to work on certain areas.**

DF Automation is looking for collaborators in the robotics space. We believe that this sector is poised for growth and we welcome companies to get in touch and work with us.



## TALENT HIGHLIGHTS FOR 2021

### Dé Gradua Alta Calidad Hackathon 2021

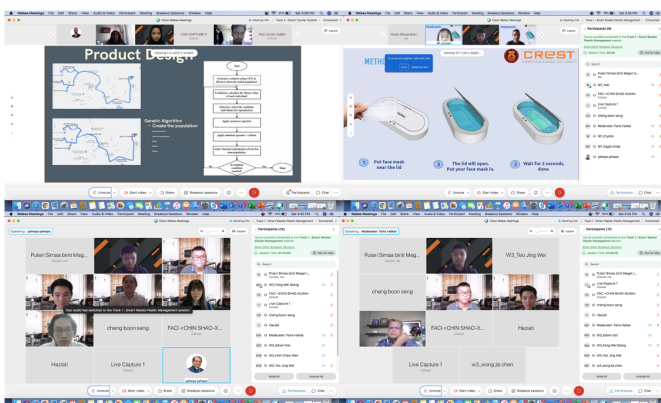
CREST participated in the virtual UTM Dé Gradua Alta Calidad (DEGA) Hackathon on 10 April 2021. Organised by The Kolej Tunku Canselor Student Committee, Universiti Teknologi Malaysia, the hackathon sought to enhance the participants' intellectual capabilities, knowledge and skills in solving real world problems in the area of smart city.

29 participants consisting of Year 2 - Year 4 UTM Electrical Engineering students from the university participated in the challenge where they were tasked to develop a proposal based on the themes of smart waste/plastic management and smart courier system and pitch their ideas to a pool of industry judges which include representatives from Synapse, Elliance and Iskandar Investment Berhad.

As part of CREST's contribution, the organisation conducted a technical and presentation skills workshop. It also provided the use of UVOIS, a digital platform for students to submit their proposals as well as to conduct the judging sessions. This, is in addition to extending invitations to industry leaders who participated as judges for the event.



The poster features logos for KTC, UTM, and DEGA at the top. The main title is 'DEGA HACKATHON'. Below this, two themes are highlighted: 'SMART WASTE / PLASTIC MANAGEMENT' with a trash bin icon and 'SMART COURIER SYSTEM' with a cardboard box icon. The event dates are '9 - 10 APRIL 2021' via 'CISCO WEBEX | UVOIS'. A note specifies '\*FOR UTM STUDENTS ONLY\*'. The schedule is: DAY 1 (5.30PM - 6.30PM) and DAY 2 (9.00AM - 5.30PM). Prizes for winners are listed: FIRST (RM70 + E-CERTIFICATE), SECOND (RM50 + E-CERTIFICATE), and THIRD (RM30 + E-CERTIFICATE). A QR code is provided for registration, with contact info for Wei Han (011-10979). It also mentions collaboration with CREST and TheGreatLab. Social media handles for @degaofficial21 are listed at the bottom. A red banner in the bottom right corner says 'REGISTRATION FREE'.



# UTeM Innovation Bootcamp

The UTeM Innovation Bootcamp was held on 15 - 19 February 2021 and was conducted virtually by the UTeM Student Council.

Targeted at UTeM undergraduate students from engineering and technology background, the program aims to develop creative and innovative thinking skills among the students, in addition to exposing them to new skills outside their current field of study.

A total of 52 students participated in this program.



***“This is the first year that CREST, through TheGreatLab, is participating in the UTeM Innovation Bootcamp. The event is in line with Malaysia’s 2015-2025 Education Development Plan to produce high quality TVET graduates and we were amazed by the quality of work produced by these students at the event.”***

***Dr NorAzmi Alias, VP, R&D & Talent Development, CREST.***

CREST contributed to the event by providing the challenge statements received from industry partner, INTEL. In addition, the company invited industry representatives to judge at the event finale.





# Malaya Makerthon 2021

CREST participated in the Malaya Makerthon 2021, a virtual event, organized by Universiti of Malaya, from 10 - 18th April 2021. The event saw participation of students from various higher learning institutions and universities.

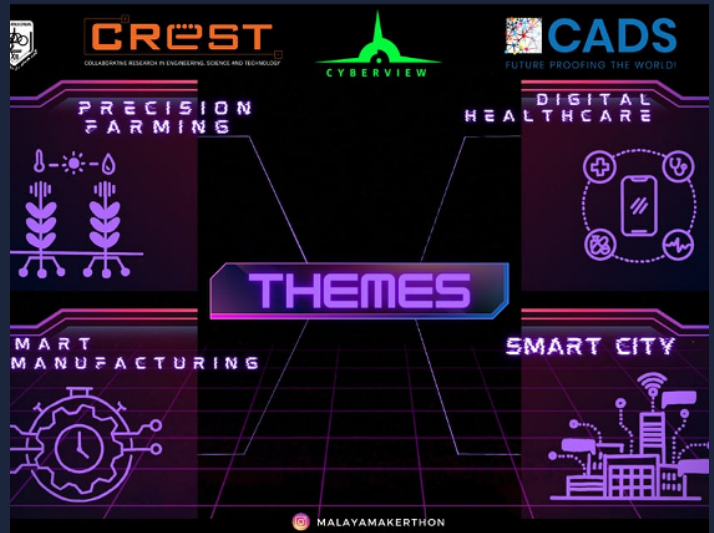
Derived from the word "Make" and "Marathon", Malaya Makerthon is a design sprint-like event whereby participants in teams of 3-4 people compete against each other to create functional prototypes within a certain time limit. The program aims to promote critical thinking and problem solving skills that will result in solutions that address challenges in the areas of smart cities, precision farming, manufacturing and digital health.

Successful students will be able to secure internship placements with selected industry partners.

This is the third year that CREST's TheGreatLab participated in Malaya Makerthon. Other partners include The Centre of Applied Data Science (CADS), Printcious, Cyberview Sdn. Bhd, Etctech Global Sdn. Bhd and Jelo Marketing Sdn. Bhd.

CREST's contributions to the program include providing the challenge statement, contributing its UVOIS platform where students and teams were able to submit their proposals to industry leaders, in addition to inviting industry representatives as judges for the event.

For more information on the Malaya Makerthon 2021, head over to: <https://bit.ly/2T1lmjw>



# TESTIMONIALS FROM THE GREAT LAB ALUMNI

## What are your thoughts on CREST's TheGreatLab (TGL) initiatives?

Firstly, I think that TGL is an excellent initiative to get students to learn more about the latest technology in the industry and how it is relevant to them. Secondly, it is a great program that allows students to apply what they have learnt via hands-on projects that they might not have had the chance to get involved with previously.

Finally, the program helps students to kick start their self-learning process, whereby they can put their knowledge and learnings to the test, outside a normal classroom setting.



**Yap Chin Pok,**  
Teacher  
Han Chiang High School

## In what ways do you think your students have benefited from the program?

TGL enables students to learn more, at a quicker pace. It allows them to learn beyond a classroom setting and it pinpoints the areas of strengths and gaps of each student. In addition, the program teaches them to be more proactive with learning and helps them to stay abreast with the latest trends in technology.



**Omar Khaled Abouelmagd**  
4th year student  
UTM

## What are your thoughts about being a part of the TGL Alumni?

It was a great and unique learning experience. All the programs related to TGL have given me with invaluable learning outcomes in various aspects such as adoption of new technical skills, soft skills, the ability to work as a team and connect with different set of people.

## What are some of the key learnings you have from participating in the TGL programs?

The key advantage of TGL is the connections with industry experts and the ability to know the difference between real life problems and university assignments.

It has taught me the importance of incorporating critical thinking to solve real problems using whatever technology we have in hand and not only to solve the problem but planning for its business model as well because a solution without a successful business model cannot be implemented.

Connections with mentors was another advantage provided by CREST during TGL which helped me to improve my pitching and idea delivering skills which is important because as an engineering students, we understand the technical terms but when we pitch to other parties who aren't from the same background, we have to be able to deliver our ideas in a simple and easy to understand manner.

## How will your experience with TGL benefit you in the future?

This wonderful experience will help me to create real life solutions for people around me and to bring upon a positive change in the lives of many.



## What are your thoughts on CREST's TheGreatLab initiatives?

It is an excellent initiative and beneficial for students from higher education institutions. As a result of the initiative, graduates have grown in multinational companies with students taking up jobs in high-value units such as R&D, product development and design.

## In what ways do you think your students have benefited from the program? In your opinion, has participation given them a good head start to a new way of thinking and learning?

There are many benefits from the program such as exposing the students to real-life working experiences via the mentoring session with industry players as well as a platform for students to come together and gain industry exposure. To date, the program has successfully inspired students to delve into the field they are exploring.



**Dr Ahmad Sabirin**  
Lecturer  
School of Engineering  
UITM Shah Alam

Additionally, the program has given students a clearer picture of what they will go through in their work environment and this is something which no university experience or learning through a lecturer theatre can provide.

## What are some of the key highlights and learnings from the program?

Students can participate in various talent development programs such as industry workshops, industry bootcamps, technical training and industry lectures. All these experiences are important to ensure that students receive up-to-date and relevant information related to their field of study.

## CREST IN THE NEWS

**biztech.asia**  
**JOBS AND CAREERS SHOW**  
Nurturing Malaysia's talent through greater industry-academia collaboration

**Guest:**  
**Dr. NorAzmi Alias,**  
Senior VP, Research &  
Talent Management  
CREST

**Guest:**  
**Eric Chan,**  
Vice President/General  
Manager of IOTG  
Customer Engineering  
Intel Corporation

**Wednesday**  
**30 JUNE**

8 pm Singapore/Kuala Lumpur  
Manila/Perth  
7 pm Jakarta/Bangkok/  
Ho Chi Minh

**Host:**  
**Brian Fernandez**

**f LIVE** facebook.com/biztech.asia  
www.biztech.asia

The Stanford University-Silicon Valley ecosystem for the tech industry is the global gold standard for industry-academia collaboration.

Find out how CREST is emulating this model and facilitating talent development in Malaysia, with partners like Intel Corporation and how talent has been developing in the E&E industry over the last nine years.

Listen in on the conversation between CREST's Dr. NorAzmi Alias, Eric Chan of Intel Corporation and Biztech.asia host, Brian Fernandez on the topic of "Nurturing Malaysia's talent through greater industry-academia collaboration" by heading over to: [bit.ly/3hxEkTW](https://bit.ly/3hxEkTW)

## CREST IN THE NEWS

Innovations in healthcare can be slow because it is a highly regulated industry. The pandemic, however, has helped Malaysians get used to the idea of using an app for contact tracing, booking virtual health consultations and even registering for the Covid-19 vaccine.

The potential of digital healthcare is massive. More complex remote medical consultations and even surgeries can be possible with the use of the right technologies. The question is whether the momentum gained during the pandemic will last. Digital healthcare also relates to portable digital health records. The much-discussed vaccine passports would be a global experiment to test whether this idea works. Opinions vary, however, on whether such a passport can be effective and inclusive.



Digital Edge spoke to industry players Jaffri Ibrahim, CEO of CREST, Raymond Choy, CEO of Doc2Us and Maran Virumandi, managing director and co-founder of DoctorOnCall to find out what they think about these issues.

To read the full article, head over to: [bit.ly/3xD1fKk](https://bit.ly/3xD1fKk)

## CREST IN THE NEWS



### Intel, CREST & TalentCorp collaborate to help university students bridge gap in learning

Intel Malaysia, together with TalentCorp and CREST, announced an initiative to help university students get a step closer to their normal learning experience through the launch of Systems Cloud for University (SC4U).

The objective of the program is to restore the hands-on learning experience for university students where Intel invested in a systems cloud, consisting of board, systems and tools that are available (free of charge) through the cloud for students and lecturers to resume lab classes during the pandemic.

"The SC4U initiative is an example of industry-academia working together to improve the competencies, skills and knowledge of Malaysia's talent pool," YB Datuk Seri M. Saravanan, Minister of Human Resources Malaysia commented in his keynote address.

TalentCorp will assume the role of bridging the talent, particularly graduates, to utilize SC4U to improve employability, while CREST will manage the engagement with universities. Intel's goal is to help contribute to the learning experience of the students, which has been lacking due to the ongoing pandemic.

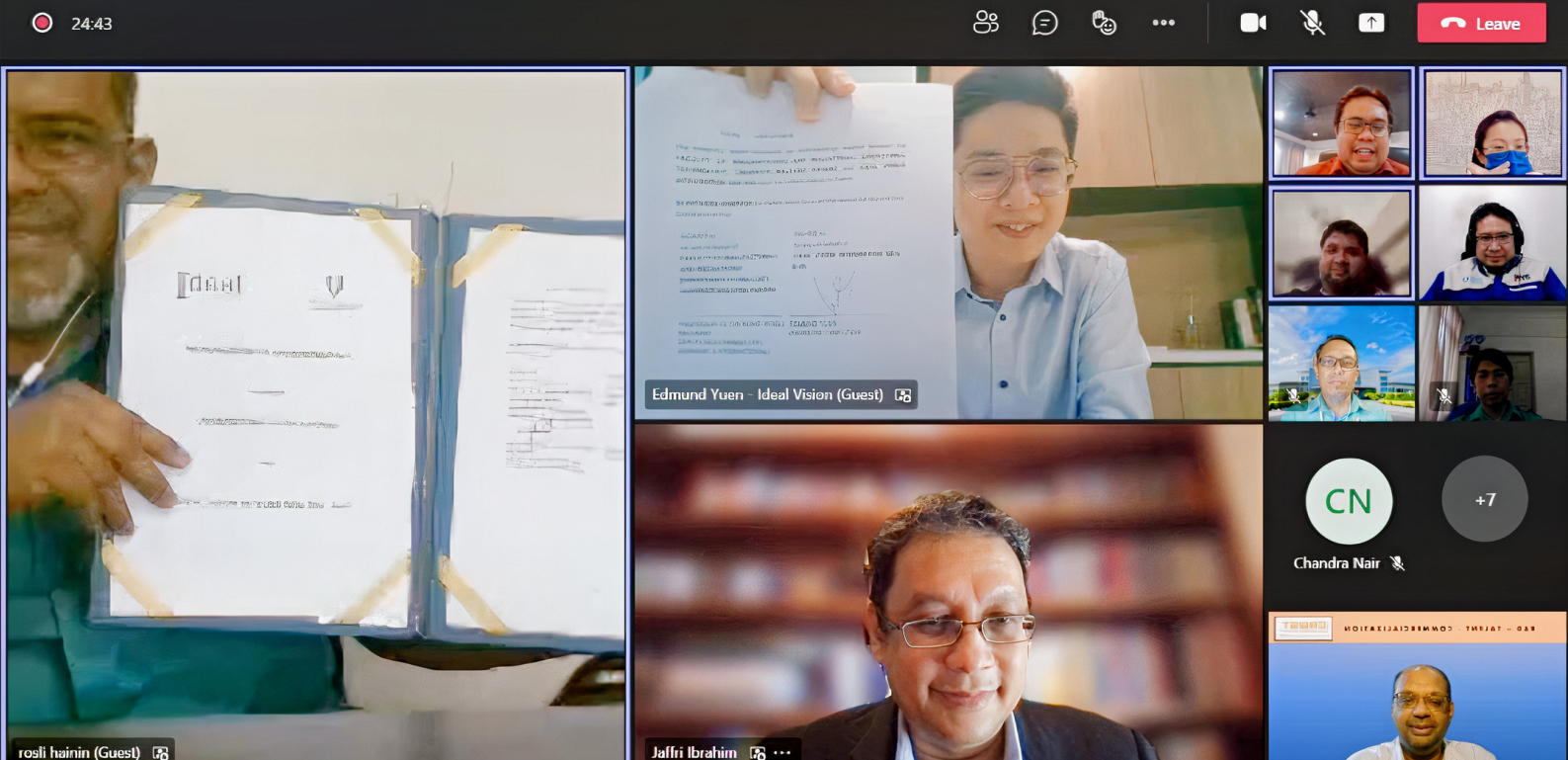
"To be realistic, we won't be able to completely replace what physical lab experiences can provide, but we strive to restore 80% of the hands-on learning experience through the SC4U offering", Eric Chan, the Vice Presidents of Intel Internet of Things Group said.

"At CREST, we believe in the spirit of collaboration and strive to work with the industry and academia to grow a pool of domain experts as well as equip students with knowledge and skills for the future of work. We are honoured to partner with Intel for the roll-out of the program through the CREST TheGreatLab platform which hosts a network of educators and students," Jaffri said.



# CREST IN THE NEWS

MOU Signing Between Ideal Vision Integration Sdn Bhd & Universiti Malaysia Pahang (UMP)



## Ideal Vision Integration, UMP to create positive impact for the R & D, Talent Development ecosystems

Our CEO, Jaffri Ibrahim was proud to witness the signing of the Memorandum of Understanding (MOU) between Ideal Vision Integration Sdn Bhd and Universiti Malaysia Pahang on June 23, 2021.

As part of the MoU, Ideal Vision will be working together with UMP to develop a prototype machine for the targeted PDF project, funded by CREST. For this initiative, Ideal Vision will be involved in the design, assembly and testing of the machine whereas UMP will work on developing artificial intelligence for the entire system.

The collaboration will also see Ideal Vision becoming an industry partner for UMP's 3u1i Programme, an initiative sanctioned by the Ministry of Higher Education and will give students the opportunity to undergo real industry training for one year as part of their curriculum at Ideal Vision.

"The partnership between both parties will no doubt bring upon positive impact and contribute to the development of the R & D and Talent Development ecosystem in Malaysia. This is indeed welcoming, as these students will be propelled and accorded with the opportunity to undergo industrial training that will equip them with industry-relevant experience to shape them into future ready leaders of tomorrow." Jaffri said.

He added "At CREST, we believe that where there is collaboration, wonderful things can happen. The symbiotic partnership of Ideal Vision and UMP is testament to the coming together of two great organizations whose dynamic merging of knowledge, capabilities and skills are pivotal to the development of a robust talent pool whilst simultaneously fostering innovation to deliver real, impactful changes. We look forward to many more collaborations in the future."

# COLLABORATE WITH US

For details on our programs and initiatives, contact our team below:

## INITIATIVES

OPEN TARGETED R&D GRANT

THE GREATLAB (TGL) PROGRAM  
- TGL YOUTH INDUSTRY BOOTCAMP  
-GRADUATE INNOVATION PROGRAM  
- INDUSTRY LEADERSHIP PROGRAM

GALLIUM NITRIDE GAN RESEARCH PROGRAM

DIGITAL HEALTHCARE CLUSTER

INTELLIGENT & INNOVATIVE CITY CLUSTER  
SMART MANUFACTURING  
PRECISION AGRICULTURE  
NEW PRODUCT DEVELOPMENT & INNOVATION

MEMBERSHIP & CREST PLACE PENANG

MARKET & INDUSTRY DEVELOPMENT

COMMUNICATIONS & CREST NEWSLETTER CONTRIBUTIONS

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