INFOCOMM CLUB BYTES

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IIM INFOCOMM MEDIA DEVELOPMENT AUTHORITY
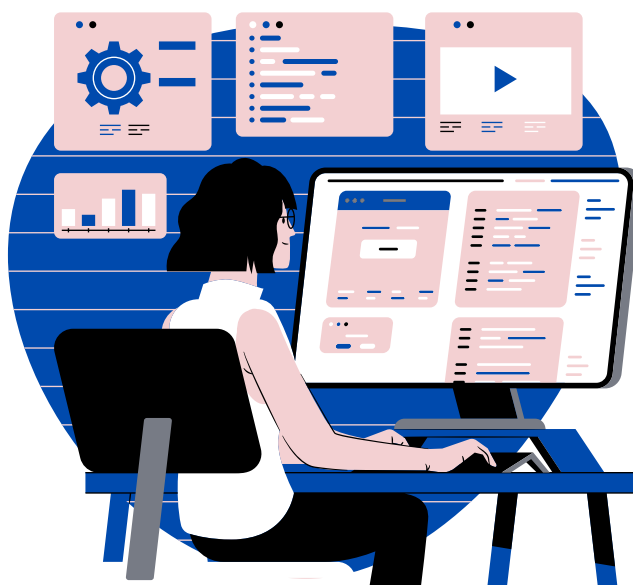
CONTENT

LOOK FORWARD TO NEW AND EXCITING ACTIVITIES COMING YOUR WAY IN 2022!

Sneak preview of what's in-store for you and your students. Join us at the Teachers Seminar in January to find out more.

LEARN THROUGH PLAY

Out-of-classroom learning experiences & activities

NATIONAL LEVEL TECH COMPETITION

More details unveiling in early 2022. Stay tuned!

COMPANY VISITS

Join us for visits to Tech and Media companies for sneak peeks behind the scene

TRAINING ROADMAPS IN TECH DOMAINS

Embark on IMDA designed training in Emerging Tech areas

STUDENT DEVELOPMENT PROGRAMMES

Passionate students will be given opportunities to deepen their skills and be exposed to mentorship opportunities

LEARNING JOURNEYS FOR TEACHERS

Curated visits and hands-on workshops just for Infocomm Club teachers

VALUES-IN-ACTION (VIA) PROJECTS

VIA projects are designed by IMDA for students to contribute back to the community. We are looking for schools to join our inaugural 'Digital for Life' VIA project in March 2022!

**Interested schools can email IMDA_CODESG@imda.gov.sg to reserve a slot!**

Training and resources will be provided by IMDA.

UPCOMING EVENTS

1. INFOCOMM CLUB TEACHERS SEMINAR 2022

Come join us at the inaugural Infocomm Club Teachers Seminar and hear what IMDA has in store for you and your students! From unique bite-sized learning opportunities to exciting workshops and learning journeys, come join us as we unveil our new menu offerings for the Infocomm Club CCA.
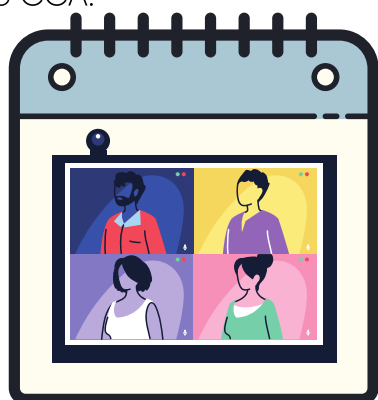
SAVE THE DATE!

Date: 26 Jan 2022
Time: 3.00PM – 4.30PM
Format: Via Zoom

Watch out for our invitation in early Jan 2022!

2. ICM ROADMAP APPLICATIONS

Learning roadmaps in multiple tech domains will be open for schools' application in 2022. This includes a series of trainings developed in collaboration with IMDA's industry partners. Ranging from 24 to 56 hours, each roadmap will give students a good understanding of the tech domain through hands-on activities and a final project work. Full details will be released at the Infocomm Club Teachers Seminar!
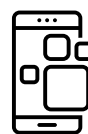
Artificial Intelligence   Cybersecurity   Game Development   Mobile App Development

3. DIGIGIRLZ 2021

DigiGirlz is a programme for girls to learn about careers in technology, connect with Microsoft employees, and participate in hands-on computer and technology workshops.

This year, students in Singapore will learn how to quickly build an imaginative world with Minecraft:Education Edition, and work in teams to take part in a "live" virtual hackathon, with attractive prizes to be won. Registration opens 18th Oct 2021 and closes 31st Oct 2021.

For more details, refer to event EDM on page 9 or visit https://tk.sg/digigirlz!

TECH FOR GOOD

NTU AND TAN TOCK SENG HOSPITAL USE ARTIFICIAL INTELLIGENCE TO DIAGNOSE GLAUCOMA MORE EFFECTIVELY

Dr Leonard Yip (left) from Tan Tock Seng Hospital and Assoc Prof Wang Lipo from Nanyang Technological University led a team to develop a novel method that uses AI to screen for glaucoma. (NTU Singapore)

Glaucoma is an eye disease caused by damage to the optic nerve. With the rapid aging of the global population, it is expected to affect 111.8 million people worldwide by 2040.

Nanyang Technological University and Tan Tock Seng Hospital have developed an innovative system for diagnosing glaucoma by using artificial intelligence technology to analyse the patient's stereo fundus images, without the manual examination of retinal images. Ophthalmologists would no longer need to measure the patient's intraocular pressure during diagnosis, which is time-saving and efficient.

Click for Full Article: NTU Singapore

USING AI TO PREDICT DRIVERS' LIKELIHOOD OF HEART ATTACKS

Continental Automotive Singapore and AI Singapore will be jointly conducting research on how to use AI to detect drivers' heart rates and predict their likelihood of experiencing heart attacks while on the road. If successful, this could reduce the rate of accidents arising from such incidents and thus improve road safety.

They plan to combine the use of advanced biomedical signal analysis and predictive algorithms to facilitate the predictions. The research project is still in its initial phase and is expected to be completed by December 2023.

Click for Full Article: AI Singapore

TECH @ PLAY

PHENOMENON OF VIRTUAL INFLUENCERS

The prevalence of social media coupled with the development of technology has led to the boom of virtual influencers, even in Singapore.

Novelty aside, lower costs and the ease of crafting the personalities of these virtual influencers to fit their target audience may have caused the rise in their popularity.

Above: Maya (PUMA) Below: Ava (BHG)

BHG, a homegrown retail company established a partnership with local virtual influencer Ava, created by Reyme Husaini, a 27-year-old Lasalle College of the Arts senior as part of his Fashion Media and Industries final project.

PUMA has also partnered with Southeast Asia's first ever virtual model, Maya, who campaigned with Singaporean actor Tosh Zhang.

A survey by YouGov in 2020 showed that 60% of Singaporeans did not trust virtual influencers. However, the world of advertising is constantly evolving and the emergence of a personality that fits the expectations of consumers could change the minds of these Singaporeans.
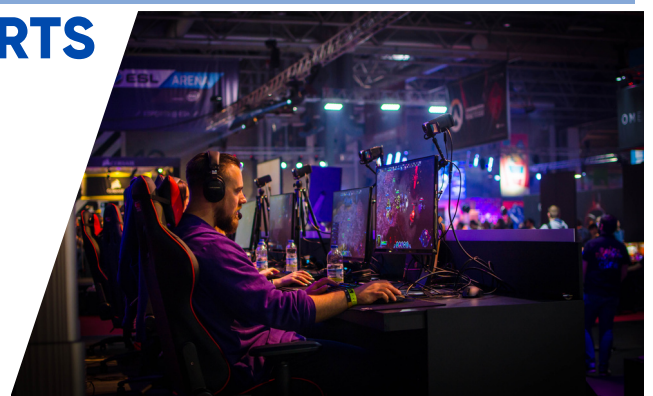
Click for Full Article: Vulcan Post

GAME ON FOR ASIA'S E-SPORTS SCENE

In just a few years, e-sports has moved from being perceived as a teenage time-waster to its position today as a major global industry. It is estimated that by 2022, the value of the global e-sports market will be approaching roughly US$1.8 billion, increasing to over US$3 billion by 2022.

Twitch, one of the world's biggest streaming platforms for gamers, is estimated to have

grown its audience by 31 per cent last year, and Steam, a video game digital distribution service, hit an all-time record of concurrent users in mid-2020 with over 24 million users.

Click for Full Article: The Business Times

TECH @ WORK

NEW ROBOT ON PATROL TO WEED OUT ERRANT SMOKERS, E-SCOOTER RIDERS

Right: Xavier patrols Toa Payoh, keeping an eye out for unsavory behaviours (HTX Media Release)

Xavier, an autonomous robot designed to weed out "undesirable social behaviours" will be on patrol at Toa Payoh Central neighbourhood as part of a three-week trial starting on 5th Sept 2021. Two of these robots will be on the lookout for errant smokers, illegal hawkers, motorcycle and e-scooter riders on footpaths, and gatherings that exceed the current limits on group sizes.

Equipped with cameras that have a 360-degree field of vision and can see in the dark, the robots will be able to alert public officers to these offences in real-time. They will also be able to broadcast and display messages to educate the public against such undesirable behaviour.

Click for Full Article: The Straits Times

DHL EXPRESS DEPLOYS AI-POWERED SORTING ROBOT

DHL Express, has introduced DHLBot, an AI-powered robotic arm that automates parcel sortation, in South Korea and Singapore. The DHLBot will replace manual sortation of small parcels and enable hubs and gateways to handle greater volumes, particularly during peak season, while increasing overall operational efficiency by at least 40 per cent.

Click for full article: DHL

5 MRT STATIONS TO USE VIDEO ANALYTICS TO BOOST SECURITY

A video analytics system will be introduced at Outram Park, Chinatown, Dhoby Ghaut, Little India, and Serangoon MRT stations by the end of this year to detect unattended luggage and unmasked passengers. The system, which analyses images from the closed-circuit television (CCTV) network at these interchange stations, will also be able to gauge passenger density. SBS Transit said the system will enable staff to respond to issues more quickly.

Click for Full Article: The Straits Times

## MORE THAN 50 ROBOTS ARE WORKING AT SINGAPORE'S HIGH-TECH HOSPITAL

From performing surgery to carrying out administrative work, robots have become an integral part of the 1,000-bed hospital's workforce. Singapore already has the highest adoption rate of industrial robots anywhere in the world, with 9 per 100 workers, but that is mostly in the electronics sector. The hospital hopes robots can make healthcare more accessible, affordable, and higher quality, as well as safer for pandemic situations.

Click for Full Article: CNN

THERE WAS NO INFOCOMM CCA IN HIS SCHOOL, SO HE STARTED HIS OWN

ST ANDREW'S JC INFOCOMM CLUB CCA STORY
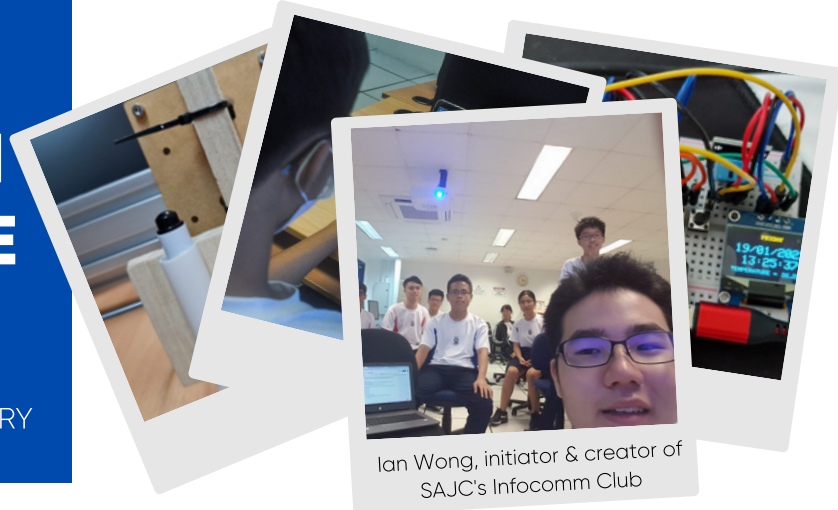
Ian Wong, initiator & creator of SAJC's Infocomm Club

IMAGINE you're a student interested in tech, but you learn that no Infocomm CCA exists in your school—what would you do then?

While many students may resignedly give up here and join another CCA, relegating their tech interests to outside of school, Ian Wong, now a St Andrew's Junior College (SAJC) alumni, did not.

Mr Lin Wenquan
Infocomm Club CCA In Charge

> "As teachers, we must be willing to learn with our students.
>
> **- Lin Wenquan, CCA Teacher in Charge**

Filled with motivation to create a place for tech-inclined students with nowhere else to go, Ian approached his school's HOD CCA and HOD EdTech and made his case in 2019.

"On top of the desire to learn and share more about computing and programming, Ian also wanted to create a community for this group of interested students, and to instill a stronger sense of belonging in them," said Mr Lin Wenquan, current Teacher-In-Charge of SAJC'S Infocomm Club CCA. "He wanted SAJC to be welcoming of students with varied interests."
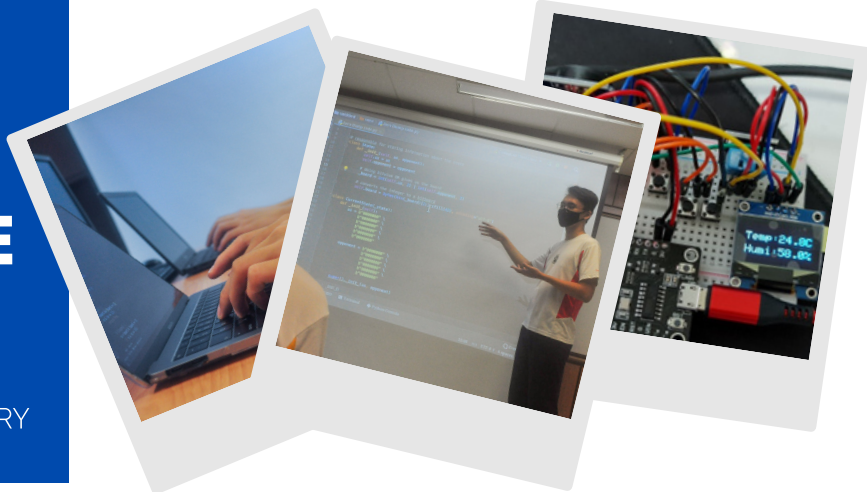
What exists as SAJC's Infocomm Club CCA today began life then as a student-initiated interest with Ian and the school's HOD EdTech both spearheading the first membership drive during their 2020 JC1 Orientation.

Right: SAJC Infocomm Recruitment Poster
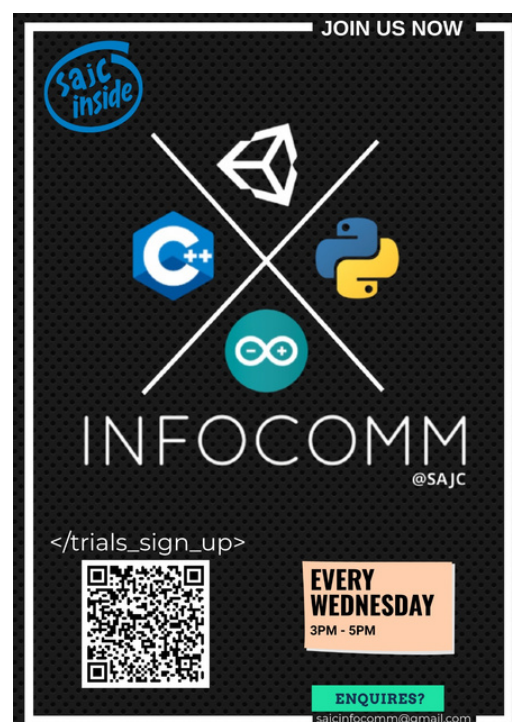
THERE WAS NO INFOCOMM CCA IN HIS SCHOOL, SO HE STARTED HIS OWN

ST ANDREW'S JC INFOCOMM CLUB CCA STORY

The road they walked wasn't an easy one—they encountered many difficulties and overcame various challenges. But the students were interested, and there was high demand for the interest group.

To ensure sustainability of the interest group, a substantial amount of time and effort was invested to create a CCA roadmap. Teachers also took time out to look for projects and competitions to maintain students' interest and engagement.

Fortunately for them, SAJC's HOD EdTech, Mr Sia Lai Chai, had programming knowledge and was able to lend his expertise to the team, contributing greatly to the realization of the interest group.

Mr Sia Lai Chai
HOD Educational Technology

All efforts paid off when the interest group was later formalized into an official CCA.

Being involved in the interest group and later the Infocomm Club CCA not only benefitted the students but also the teachers. Mr Lin Wenquan shared that he had learn so much in coding and programming (e.g. Python, Arduino and Flutter), that he could even code a yu-sheng app that hollers auspicious greetings to comply with the COVID-19 restrictions. "As teachers, we must be willing to learn with our students."

Below: Ian (most left) with his classmates at a Digital Readiness Event.

While Ian is serving NS right now, we hear that he intends to pursue further studies in tech, with a secured placement in NTU so far. We wish him all the best!

WE WANT TO HEAR FROM YOU!

Have an exciting story or idea you want to share with us?
Please send your stories, ideas and/or enquiries to IMDA_CODESG@imda.gov.sg.

DigiGirlz 2021

Learn • Connect • Build

18 & 19 November

Calling all Secondary School Students!

You are invited to participate in **DigiGirlz 2021.** This virtual event gives girls opportunities to **learn about careers in technology** and **connect with Microsoft employees.**

What to expect:
- Free online workshop on Minecraft: Education Edition
- Compete in a "live" virtual hackathon
- Connect with a Microsoft mentor
- Exciting prizes to be won!

Questions? Email digigirlz@tk.sg

Register by **5 Nov**
tk.sg/digigirlz

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