INFOCOMM CLUB BYTES

A TASTE OF THINGS TO COME

Have our programmes whet your appetite?

READ THIS ISSUE TO SEE WHAT'S NEXT!

BONUS
An Anti-Scam message from the Police on 17-19!

BROUGHT TO YOU BY

IM
INFOCOMM
MEDIA
DEVELOPMENT
AUTHORITY

Editor's Letter

In the blink of an eye, Term 1 has passed us by and what an eventful term it has been!

The team sincerely hopes that all of you have enjoyed our refreshed menu for Infocomm Media Clubs. There's something for every school and every club in this menu, so sign up for the exciting programmes that are coming your way. Of note is our inaugural Leadership Camp happening at the end of June as well as the eagerly anticipated national competition in the second half of the year! Do keep a look out for our eDMs and get ready to hit the submit button when registration opens. Thank you for partnering us in elevating your members' CCA experience and helping them grow as ambassadors of tech.

We are where we are because of you! Hang in there for Term 2!

Don't forget that you can always write to us at **imda_codesg@imda.gov.sg**

We are better together.

Upcoming Events!!

Jan	Feb	Mar	Apr
			DISCOVER: Learning Journeys *you are here!*
May **EXCEL:** National Tech Competition (Launch)	**Jun** **LEARN:** Bootcamps **LEAD:** Leadership Camp	**Jul** **SERVE:** VIA Projects (Training)	**Aug** **DISCOVER:** Learning Journeys **SERVE:** VIA Projects (Execution)
Sept **EXCEL:** National Tech Competition (Entry Submission)	**Oct**	**Nov** **EXCEL:** National Tech Competition (Finals & Awards Ceremony)	**Dec** *School Holidays!!!*

SENSETIME AI BOOTCAMP

See how Artificial Intelligence is integrated in our lives!

With just 5 days in the coming June holidays, secondary and JC students can gain insights into what Artificial Intelligence (AI) is all about! Join the SenseTime AI Bootcamp to learn how AI is integrated in our lives today and how you can use it in a digital-first future.

Build A Digital Future

Get a headstart in the Artificial Intelligence era. Learn basic Python programming to advanced deep learning concepts, and understand how self-driving cars, filter apps and digital assistants like Siri and Alexa work.

Learn, Code & Create

Experience SenseStudy, an online AI learning platform, through interactive and hands-on activities about topics such as facial authentication, image processing and more.

What is SenseStudy?
- An Online AI learning platform
- Learn about facial & image authentication and image filters
- See real-world applications

Experience A Hackathon!

As part of the bootcamp, create projects that solve real-world problems, apply new skills learnt, & win prizes. Plus, get the opportunity to connect with experts in the AI industry!

Bootcamps Available

Bootcamps 1 & 2: 30 May - 3 Jun 2022
Bootcamps 3 & 4: 20 Jun - 24 Jun 2022
Conducted via online & face-to-face lessons
Venue of face-to-face lessons:
SenseTime International's Office
182 Cecil Street, #36-02,
Frasers Tower, Singapore 069547

Sign up now!
go.gov.sg/sensetime-bc2022
Sign up closes 23 May, 23:59

Organised by:
{<oding:lab}

Supported by:
INFOCOMM MEDIA DEVELOPMENT AUTHORITY
商汤 sensetime

Meta Spark AR Studio Bootcamp Programme 2022
6 to 13 June 2022

About

MeshMinds and Meta jointly present the Spark AR Bootcamp programme. Secondary and JC students will have the opportunity to create their own interactive Augmented Reality (AR) effects using Spark AR and then share what they build with the world. Through this programme, students can explore the possibilities, capabilities and potential of one of the key technologies that will power the Metaverse.

Details

- 6 days of Bootcamp, 4 hours per day.
- Students will be in split into two groups: morning (9am-1pm) or afternoon (2pm-6pm)
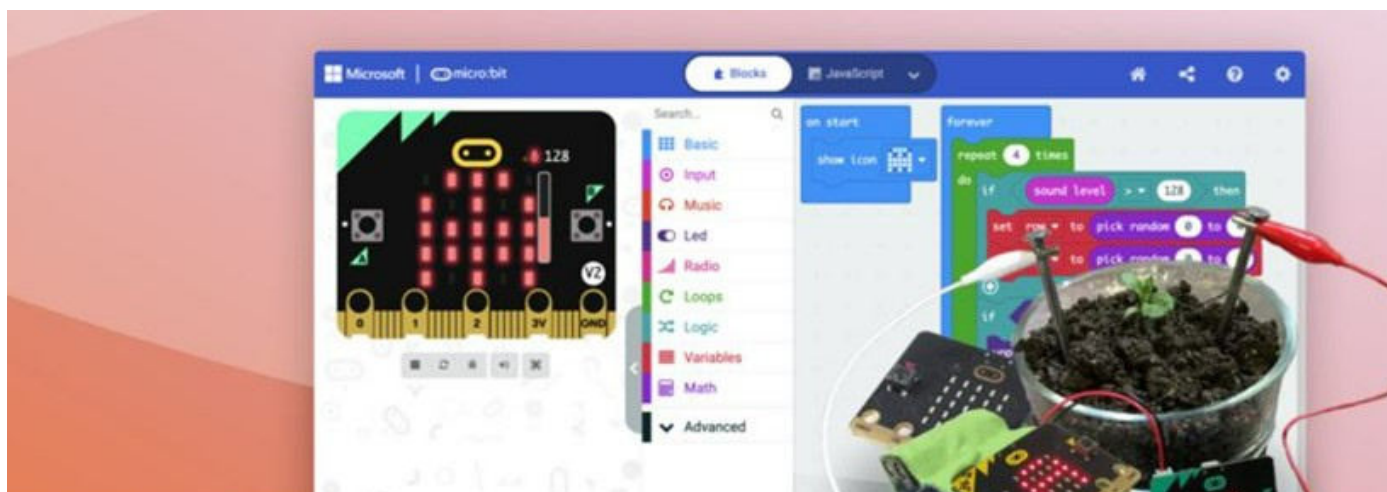
Organised by:

MESHMINDS

Supported by:

INFOCOMM MEDIA DEVELOPMENT AUTHORITY   ∞ Meta

Register here:

https://go.gov.sg/sparkar22application

Microsoft Digital Making and Game Development Bootcamp

for primary school students

A 5-day bootcamp (hybrid of online and face-to-face lessons) held during the June holidays at Microsoft. Learn more about:

Micro:Bit Digital Making

Learn how to create digital artifacts in the real world with micro:bit, sensors, actuators and upcycled materials!

Minecraft Education STEM

Learn how to code, collaborate and solve real world problems in the digital world with Minecraft Education!

Makecode Arcade Game Creation

Learn how to code and create simple arcade games that you can play with friends using Makecode Arcade!

Runs 1 & 2: 30 May - 3 June 2022
Runs 3 & 4: 20 June - 24 June 2022

To apply, visit **go.gov.sg/microsoft-bc2022**

Organised by:

Supported by:

INFOCOMM MEDIA DEVELOPMENT AUTHORITY

Microsoft

Take tech into the community

We're heading out to 4 community centres:

PUNGGOL 21
MARYMOUNT
TECK GHEE
SENJAR-CASHEW

The joy of tech is spilling over from the 4 walls of schools and splashing into the community this July and August!

Team up with industry partners to teach members of the public about Artificial Intelligence, Coding and New Media amongst other exciting topics.

Stay tuned for more details coming to you via eDM this April!

RECAP:
AWS ACCELERATOR

Data Science on AWS Accelerator Programme

Class of 2021
Graduation Ceremony

GUEST OF HONOUR

Mr Masagos Zulkifli

Minister for Social and Family Development
MP for Tampines GRC

About the Graduation Ceremony and Programme

Over **250** applicants	**88** hours of training — on AI and Machine Learning topics	**40** selected students — from 23 schools	**8** working prototypes — conceptualised and developed by students

On 19 Feb 2022, a graduation ceremony was held for graduating students of the inaugural Data Science on the AWS Cloud Accelerator programme. Students had the opportunity to showcase their Artificial Intelligence (AI) prototypes to Minister Masagos and were presented with certificates for their achievements. The event was live-streamed to family and friends.

This was the **first project in Singapore** that brought collaborators from the public, private and people sectors together, to provide Secondary school students to opportunity to develop actual AI prototypes to solve real-world problem statements.

The programme kicked off with 240 students attending a 22-hour bootcamp in June 2021 to learn Python programming and Data Science through AWS DeepRacer, an autonomous race car that learns how to drive itself around a track through reinforcement learning. The bootcamp culminated in a physical DeepRacer competition where students compete for the fastest time around a racetrack.

40 students from 23 schools were then selected to participate in the 88-hour accelerator programme from July 2021 to Jan 2022, to deepen their knowledge of Data Science through solving real-world problem statements provided by Tampines Town Council.

RECAP: AWS ACCELERATOR

Minister Masagos and partner representatives touring the student projects

"I would like to congratulate the students here for coming up with very interesting ways of presenting solutions to problems. This is why we want to go to young people like yourselves, because you see things from a different perspective."

Minister Masagos
Minister for Social and Family Development,
Second Minister for Health
& Minister-in-charge of Muslim Affairs,
MP for Tampines GRC

"I was really impressed by all the prototypes that I saw as I walked past. I saw a lot of great ideas, a lot of passion, and most definitely a lot of hard work from the students."

Mr David Chua
Business Development Director, AWS

RECAP: AWS ACCELERATOR

Student Project Highlights

Combustifier
(Winning team selected by Tampines Town Council)

Mobile app that empowers users to report hoarding and walkway blockage issues, with AI-enabled features such as identifying combustable items from photos.

Project Requartech
(Winning team selected by Tampines Town Council)

Mobile app that aims to educate users on recycling, by using AI to categorise photos of recyclable items captured by mobile devices.

Feline and Friends

Gamified community platform that seeks to incentivise responsible cat feeding, where AI is used to assess pre- and post-feeding images as part of the reward system.

SGNoise

App that leverages AI to classify different types of noise disturbances during odd hours, allowing town council to take corrective action when needed.

Students' feedback

"Previously I did not have much exposure to machine learning.
So I really wanted to learn more and create something that is actually useful."

Isabella Tan
Methodist Girls School, Sec 2

"Before joining this programme, I also took part in the DeepRacer bootcamp, and I was quite intrigued by the topics taught there. When they mentioned that there was an accelerator programme, I was very interested to sign up."

Ved Kalanke
Ngee Ann Secondary School, Sec 4

"I decided to sign up because I wanted to learn more about cloud computing and machine learning, as well as to increase my proficiency in python."

Ravikumar Shivreshi
Victoria School,
student from Code In The Community

The Partners

aws

INFOCOMM MEDIA DEVELOPMENT AUTHORITY

TAMPINES TOWN COUNCIL

DUNMAN

SGCODE CAMPUS

Look out for the next AWS Accelerator in August!

RECAP: TEACHERS' WORKSHOPS

During the March School Holidays, teachers across Singapore got the chance to attend 2 exclusive workshops organised and curated by IMDA!

Artificial Intelligence Workshop

Presentation on A.I. Education

Exploring Augmented Reality

Exclusive laboratory tour

Sharing on how the company's A.I. technologies have been practically integrated across different industries

Thanks for organising this, IMDA! It was good exposure!

Electric Vehicles Workshop

Being fully engaged during workshop

Learning taking place in a hot pink Tesla!

Exploring the inner workings and underlying technologies

THANK YOU FOR MAKING OUR FIRST TEACHERS' LEARNING JOURNEY A SUCCESS!

96% found it helped to improve their understanding of Emerging Tech and its application in the real world.

100% of the attendees indicated their interest to join upcoming workshops.

Tell us what you would like to learn about next!

Email us at imda_codesg@imda.gov.sg to tell us your preference!

Cyber Security

E-sports

Media Content

Immersive Media

Blockchain

Cryptocurrency

Internet-of-Things

Artificial Intelligence

Don't miss our next session in July!

TECH FOR GOOD

Success Looks Like This photo exhibition showcases twenty-three women who have benefitted from Codette Cares. (Photo: Lianhe Zaobao)

LEVELLING THE PLAYING FIELD

Codette Cares, a funding and mentorship programme started during the COVID-19 pandemic to help female minority/ Muslim students in technology-related fields, has opened applications for its third intake.

Launched by The Codette Project in 2020, the nine-month Codette Cares programme provides undergraduates, part-time students and mid-career switchers studying tech with a grant of $1,500 each, along with mentorship by female practitioners in the field.

The non-profit organisation was founded in 2015 by Ms Nurul Jihadah Hussain, 35, to give women from minority groups a leg-up in tech through networking opportunities. It also organises classes and workshops for women, in basic coding, data analysis and social media management. "Focusing on under-represented women creates a more inclusive space in the tech industry," said Ms Nurul, who works as a career service programme manager at the National University of Singapore.

The third round of Codette Cares was launched by President Halimah Yacob on 12 March 2022. She called The Codette Project an example of "a ground-up, ground-breaking initiative" and emphasised that community partners play an important role in demystifying the tech industry. By doing so, it helps to encourage more women to join the field.
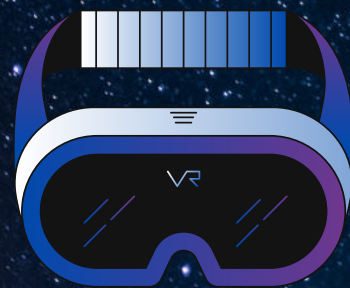
Read on to find out how the initiative has made a difference for women in tech.

[Funding, mentorship programme for minority/Muslim women in tech opens for third intake | The Straits Times](#)

The Codette Project aims to have a sustainable economic impact through providing minority women with awareness and access to the tech industry. (Photo: The Codette Project)

TECH @ PLAY

TIME FOR TOURIST TECH

With our borders having largely been shuttered during the pandemic, Singapore's hard-hit tourism sector is banking on new technology to gain an edge when the industry recovers. From virtual tours to augmented reality, the sector seeks to offer new experiences to tourists.
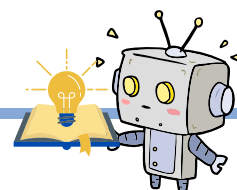
In the new normal, a tour guide of Monster Day Tours answers digitally-fielded questions through his mobile while physically walking the roads of Chinatown and checking traffic. Meanwhile, sites like the S.E.A Aquarium are closing the gap with prospective visitors through augmented reality offerings. This is done with the hope of enticing them to eventually set foot in its attractions. Local start-up, Xctuality, has even gone a step further to recreate attractions like Kampong Glam in the virtual world where visitors can explore the historic streets using Virtual Reality goggles in a gamified experience.

These initiatives show that the digital push by the pandemic has gained a more permanent foothold in the industry. Ultimately, technology is another tool to eventually draw in tourist crowds since it cannot substitute the authenticity of real-world immersion.

Watch the full video to see how the tourism industry is using technology to cross physical boundaries!

Singapore's tourism industry banks on technology to provide tourists with new experiences | Video - CNA (channelnewsasia.com)

NEVER TOO YOUNG

Apart from evergreen Roald Dahl classics or the Wimpy Kid series, children can now borrow "Daisy And Her AI Friends" from public libraries. The children's storybook is aimed at lower primary pupils and introduces concepts like binary code, machine learning and data in a way that is relatable to them.

The book marks the first time AI Singapore's literacy programme AI For Kids (AI4K) is extended to young children to help them understand technology and how to use it effectively and responsibly. Meta has also sponsored 10,000 free copies of the illustrated book which will be handed to low-income families.

Alyssa Yong, 7, is credited with inspiration for Daisy's final design. (Photo: The Straits Times)

Click the link below to find out which other characters, Daisy, a computer with legs, meets when she is lost on her first day in school.

New storybook introduces young children to complex AI concepts | The Straits Times

TECH @ WORK

SERIOUS GAMES FOR SERIOUS BUSINESS

Healthcare has always been a matter of life and death. While it is a serious business, Singhealth and Duke-NUS Medical School have been getting their medical staff to game on the job.

Recently, they have opened a simulation training facility, called the SingHealth Duke-NUS Institute of Medical Simulation (Sims) i3 Hub to hone and improve the skills of healthcare professionals with the help of serious games. The facility houses a wide range of extended-reality solutions and gaming equipment to facilitate learning. Professor Chan Choong Meng, group chief education officer of SingHealth, said incorporating serious games in healthcare training simulates challenging scenarios for learners to practise critical thinking, decision-making, and hone practical skills in a safe learning environment.

One such game teaches learners to perform CPR and identify people who need it. It allows healthcare professionals to refresh their CPR knowledge and skills remotely. Developed by SingHealth Alice Lee Institute of Advanced Nursing, the game will be integrated into SingHealth's basic cardiac life support certification training this year.

Click the link below to find out more about some of the 17 other serious games available at the Hub.

New SingHealth Duke-NUS simulation facility uses serious games to train healthcare workers | The Straits Times

SINGAPORE'S FIRST SMART DISTRICT

We won't have to wait that long to witness Singapore's first smart district in operation as Punggol Digital District (PDD) is opening in phases from 2024. It is a smart destination for work and life, where innovators and the community can meet, interact and turn ideas into reality.

Crucially, it will be the first digital district locally with interconnected digital tools and smart technologies through the Open Digital Platform (ODP). The ODP serves as the digital backbone for the district, integrating real-time data from a variety of sensors and systems to manage buildings.

For example, it uses AI to enable or disable lift cars according to the number of people waiting. More lift cars will be dispatched during rush hour and then powered off at night when there are fewer people around. Systems are no longer tied to pre-programmed schedules, which leads to increased energy efficiency.

In addition, the ODP will deploy various autonomous robots for better building management. Such robots include ones with roles in cleaning, security, and delivery. The ODP can grant robots access to buildings and arrange for lifts to transport robots to their destinations. It will also provide navigation instructions through analytics of CCTV footage when robots lose their way.

Read on to find out about the other smarts that the district has up its sleeves and in its buildings.
Data: The Key to Singapore's First Smart District – OpenGov Asia

SERVE: PHOTO ESSAY
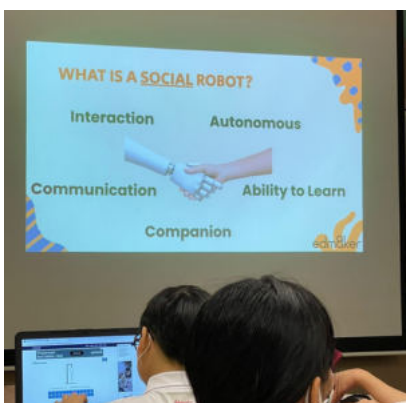
HAND-IN-HAND:
THE FUTURE OF SOCIAL ROBOTICS

by Elliot Shan Murray Wigmore
Chairperson, Robotics CCA
6-Harmony, Alexandra Primary School

You might ask, 'What is social robotics?' The answer is not as complicated as you imagine it to be. Social robotics simply refers to a robot that is able to interact and communicate with humans. Social robots mimic human behaviours and norms that have been programmed into their system. Taking on human features, a social robot is also life-like in its physical appearance and can mimic human gestures, such as waving.

During a workshop organised by IMDA in collaboration with SoftBank, we were introduced to a social robot named NAO. It is a small humanoid robot designed to interact with people. NAO can walk, dance, speak and recognise faces and objects, like you and I are able to. It has also been used in research, education and healthcare all over the world. The deployment of NAO in classrooms has also been proven to help people with behavioural and learning challenges, such as dyslexia, learn better. The possibilities are quite endless.
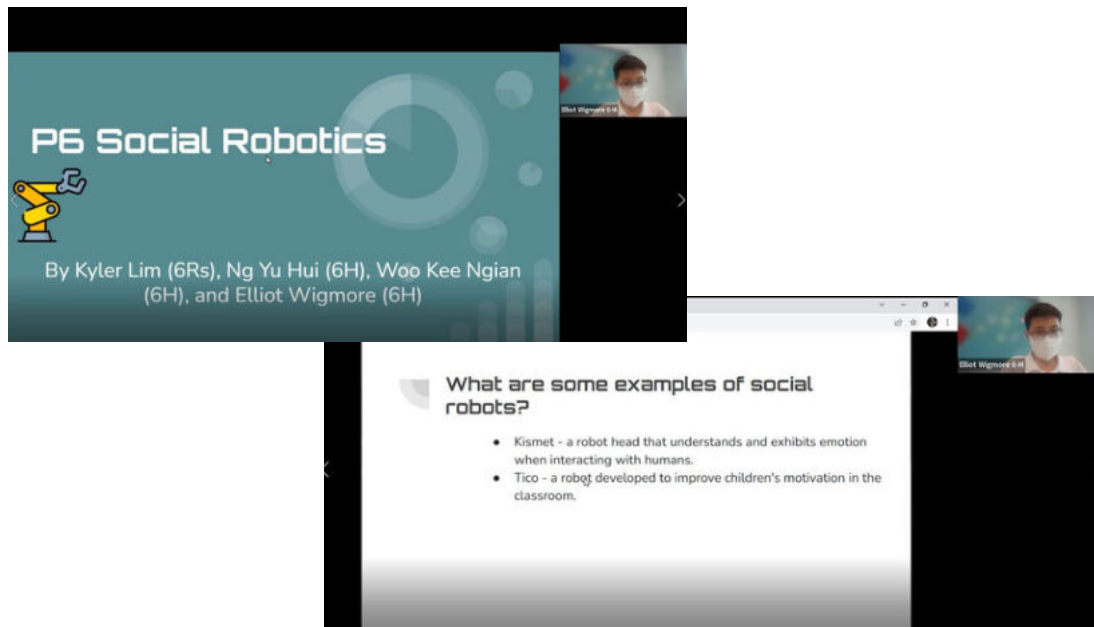

> **Social robotics simply refers to a robot that is able to interact and communicate with humans**

After discovering more about NAO, we reflected on what we had learnt about social robotics Fellow club member, Woo Kee Ngian of P6 Harmony, shared how he thought NAO can help in the classroom. "NAO can help the weaker students with understanding concepts. It might also be able to help supervise the class, like a second teacher."

SERVE: PHOTO ESSAY

As part of the VIA project, we created a slideshow to share our knowledge about social robotics. I found this to be a good exercise to reflect on what we have learned and allow us to spread the word about social robots like NAO and their positive impact on society.

After the sharing session, Elstan Soh of P6-Empathy related how he felt the lesson opened his mind to the world of social robotics and how it can be useful in society. He also shared that he initially did not know much about a robot's sensors, functions and abilities prior to the workshop.

Echoing this, Aloysius Low of P6-Creativity added, "It was entertaining to watch NAO dance, perform Taichi, and even tell us a fun and interactive story. I think it's a good tool to enhance classroom learning as it can be programmed to be engaging yet informative."

The Robotics CCA has been privileged to take part in IMDA's SERVE programme and discover more about social robotics. By sharing our journey with schoolmates, it has opened minds to envision a future where robots work hand-in-hand with humans to improve society.

Thank you for sending us your entries for the Emerging Tech x VIA Photo Essay Contest.

Winners will be announced by the end of the month!

FaceApp   now

You got a new friend request from David

Stranger wants to friend you? Scam sign. ⚠️ 🙅

Think first!
Verify their identity yourself. Speak to a friend.

SPOT THE SIGNS. STOP THE CRIMES.

scamalert.sg

SINGAPORE POLICE FORCE
SAFEGUARDING EVERY DAY

tote board
Giving Hope
Improving Lives

NATIONAL CRIME PREVENTION COUNCIL

ARE YOUR MEMBERS SCAM-SAVVY?

Make use of these resources to educate your students about scams and have a cyber wellness discussion.
Let's do our part to keep Singapore safe.

What can we do to protect ourselves and our loved ones from scams?

As Individuals

- **Remember the 6S!**
  1. Spot the signs
  2. Stop and think
  3. Slow down, don't rush
  4. Speak to others to verify
  5. Safeguard personal details and passwords (e.g., OTP)
  6. Seek help if impacted by any scams encounter or scams victimisation

- **Be wary of any online deals** that are too good to be true, online job offers that offer you a quick buck, requests for advance payments.

- **Take responsibility** by staying alert, updated, and vigilant.

As Family Member/ Friend

- **Assist the less tech-savvy** family member/friend in fortifying their phone security.

- **Reach out** to ensure that they can spot the signs of scams.

- **Let them know that they can consult you** if they are unsure if what they encounter is a scam.

- **Encourage open conversations** about scams.

- **Keep one another updated** on the latest scams, protection tips, and on anti-scam initiatives. Join the NCPC ScamAlert WhatsApp/Telegram groups to keep up with the latest information on scams.

As Employee

- **Remind your colleagues** not to click on any unknown links or open any suspicious emails.

- **Let your colleagues know** that they can consult you if they are unsure if what they encounter is a scam, and you can help to fact check or seek help if unsure.
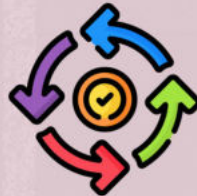
For more information on scams, visit www.scamalert.sg or call the Anti-Scam Hotline at 1800-722-6688. If you have any scam information, you can contact I-Witness online or lodge a police report to submit the information.

HOW SCAMMERS PERSUADE VICTIMS

Scammers use persuasion techniques, sometimes even a combination of them!

Consistency

People tend to behave in a way that matches their past decisions or behaviours. In investment scams, people may agree to invest more after their initial deposit.

Liking

Scammers create attractive profiles that appeal to targets. In internet-love scams, they also use affectionate terms to address victims.

Social Proof

People look to actions and behaviours of others to determine their own. In e-commerce scams, victims may view ratings and reviews of products, which may be faked by scammers.

Reciprocity

People feel obligated to return favours. In job scams, scammers may offer people a way to be employed or earn easy money.

Authority

Scammers sometimes impersonate authorised personnel, such as the police, banks and telecommunications companies.

Scarcity

Scammers induce time pressure or urgency, such as requiring people to follow their instructions by a deadline.

Ever wished you could share your energy aspirations and co-create a sustainable Singapore?

Join us for the SEGC (Youth) 2022 - Junior/Senior!

Challenge Statement:
As Singapore transitions towards a carbon-free energy future, how can we reduce our carbon footprint by leveraging the four switches and managing energy demand to achieve a more sustainable Singapore by 2050?

Registrations are now open till 13 May (Fri) 2022.

https://go.gov.sg/segc-youth