

INSPIRING INNOVATION PENANG SCIENCE CLUSTER





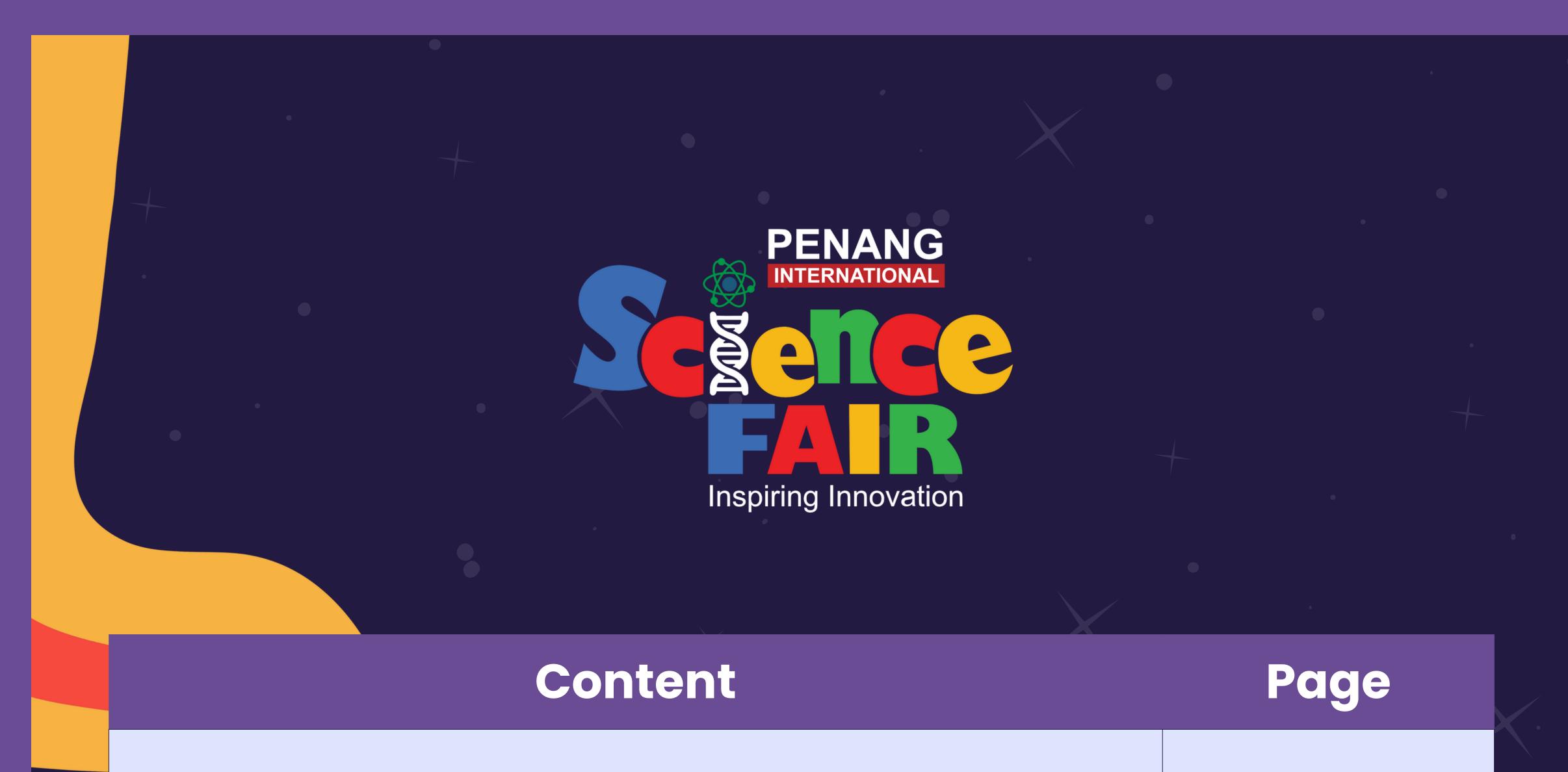
PISF 2023 EVENT NOTICE

By attending this event and/or entering this premise,

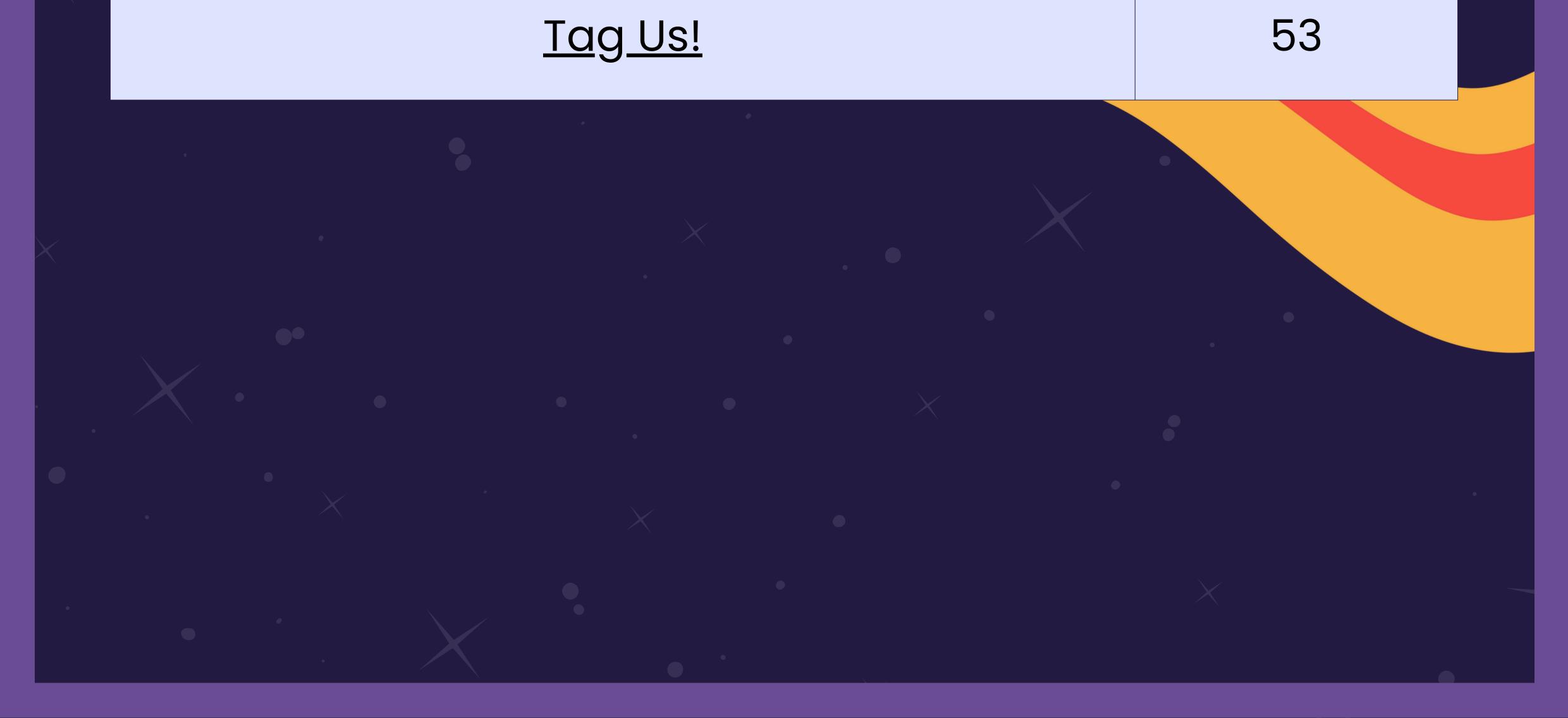
you agree to be photographed and/or filmed and give permission to use your photo/likeness/recordings in promotional and/or marketing materials by Penang Science Cluster and/or their partners.

If you participate in any PISF 2023 activities, you agree to abide by all safety policies and accept responsibility for your own safety. Participants shall agree that Penang Science Cluster, its staff and partners will not

be held responsible or be liable in whatsoever manner for any accident, loss, damage, claim, injury, illness and/or death suffered or incurred by you which may arise as a result of your participation.



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Google Map Link bit.ly/PISF2023-SPICE-MAP





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Start your journey at the concourse before proceeding to the arena.



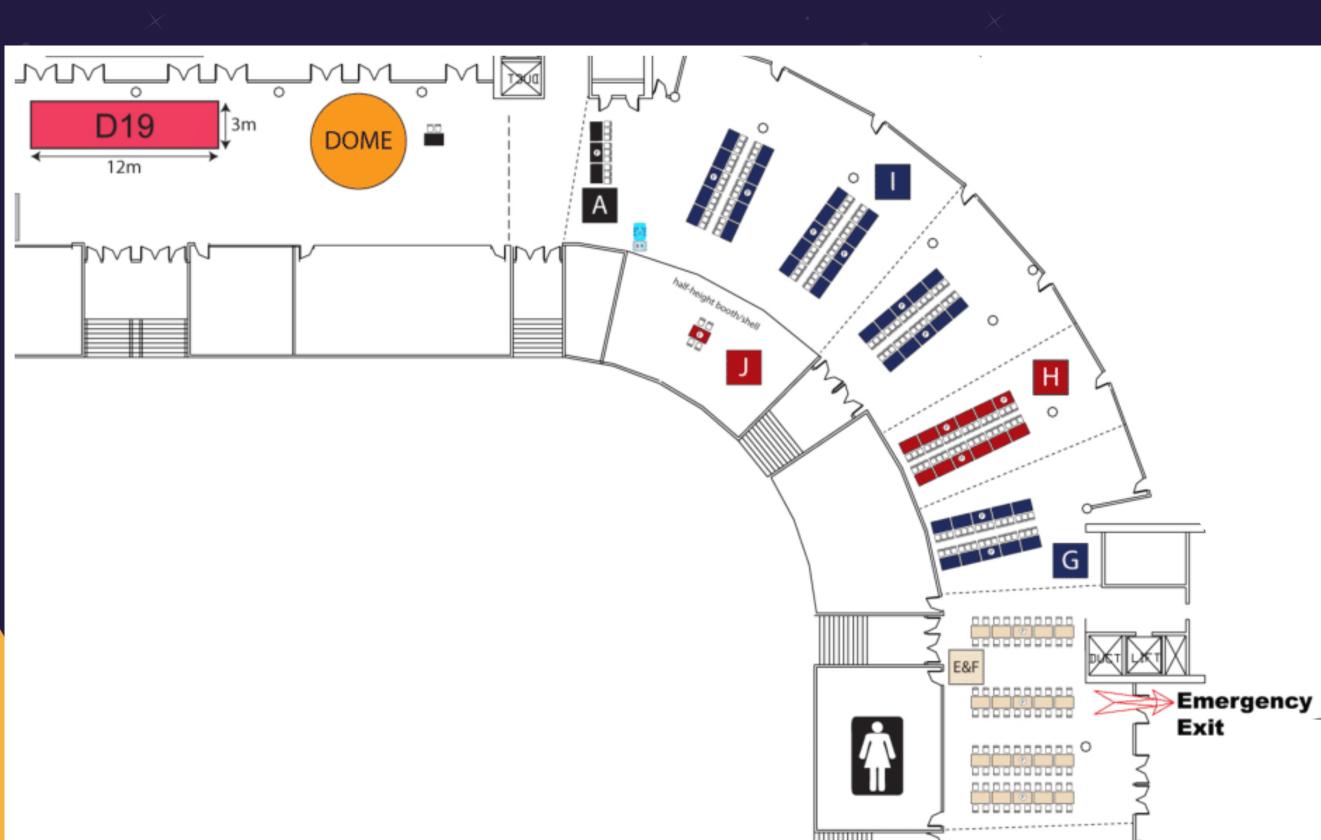
A20 - A19 P09 -		Promotion Recth	P06
Exit B		Exit A in Entrance m Concourse	
Booth	Label	Booth	Label
Plexus	P01	Tenby	A06
Keysight Technologies	P02	TAR UMT	A07
Motorola Solutions	P03	Penang Science Cluster	A08
ViTrox Corporation Berhad	P04	Smart Modular	A09
Intel	P05	Penang STEM	A10
B. Braun	P06	Penang Science Cluster	A11
Boston Scientific	P07	AMD	A12
NI (now part of Emerson)	P08	Penang STEM	A13
Agilent Technologies	P09	Penang Science Cluster	A14
Robert Bosch	P10	Jabil Malaysia	A15
HPMM	P11	Astronomy Society of Penang	A16
First Solar	A01	Smith+Nephew	A17
Greatech	A02	Arus Academy	A18
Mini-Circuits	A03	Dream Catcher	A19
ACS USM	A04	Official Contractor	
Knowles	A05	(Ascrolite Design)	A20
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SJKC Chong Teik / SK Alma Jaya	D02		
SJKC Sin Ya / SJKC Chung Hwa Pusat	D03		
SJKC Beng Teik Pusat / SJKC Sacred Heart	D04		
SR Islam Ad-Diniah / SR Islam Bahrul Ulum	D05		
SK Bayan Baru / SK Seri Bayu	D06		
SK Bayan Lepas / SJKT Bayan Lepas	D07		
SMK Seri Nibong / SMJK Perempuan China Pulau Pinang	D08		
SJKC Peng Bin	D09		
SMJK Chung Ling Pulau Pinang			
SMK Jalan Damai X Cytron Technologies Sdn Bhd	DII		
SJKT Ladang Valdor X Micron Malaysia	D12		
SJKT Sungai Ara X Inari Technology Sdn Bhd	D13		
SMK ST Xavier& SMK Tunku Abdul Rahman X ViTrox Corporation Berhad	D14 & D15		
SMK Kwang Hwa X Pentamaster	D16		
SK Seri Indah and SMK Tinggi Bukit Mertajam X Lam Research Corporation	D17 & D18		

MBPP	G01	
Swisspac	G02	
Projet Technology	G03	
Telebort	G04	
Aimsity	G06	
Hun Yuan Training and Wellness Centre	G07	
Tre 3D Print Academy	G08	
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CONCOURSE









Booth

Label

Booth



Public Voting	Α	Laser Cutter (Day2)	G	
RC Car Competition	В	AstroPhoto	H	
Instructables Competition	C	MakerFest Booth		
Coolest Projects Malaysia	D	Kids' Corner	J	
Junior Innovate National Final (Day 1)	E	Secretariat Station	K	
InclusiveSTEM	F	Rekayu	Wood Working	
Engineering Design Competition (Day 1)	G		Area	
		Kelab Astronomi USM	Dome	
Engineering Design Competition (Day 2)	E & F	Klinik Kesihatan	D19	
GameDev	Н	H Daerah Barat Daya		6





SATURDAY, 25.11.2023

Competition

Concourse

RC Car Competition

В

Instructables Competition	C	
Coolest Projects Malaysia (Primary)	D	
Junior Innovate National Final	E	
InclusiveSTEM	F	
Engineering Design Competition (Secondary)	G	
GameDev Competition	H	

MakerFest STEM Project Booth Young Makers

You're cordially invited to cast your votes in the public voting area and show your love for outstanding projects!

Join us and support these brilliant minds by voting for your favorite projects. Get more details at Public Voting Station 1 (A).

SUNDAY, 26.11.2023

Competition

Concourse

RC Car Competition

В

Instructables Competition	C	
Coolest Projects Malaysia (Secondary)	D	
Engineering Design Competition (Primary)	E & F	
Laser Cutter Competition	G	
AstroPhoto Competition	Η	
MakerFest STEM Project Booth Open Category		

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PSC-Competition



RC CAR

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PENANG INTERNATIONAL

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INSTRUCTABLES SHOWCASE & COMPETITION



Instructables Competition is a showcase of a dozen different types of innovative DIY projects made by students from over 20 schools around Penang.

Come and witness the creativity of young minds!





MAKERFEST STEM PROJECT BOOTH

Top 30 projects in Young Makers and Open categories, showcasing innovation from teams across 9 states in Malaysia and 2 from Singapore, will compete for top honors during PISF 2023.





KIDS' CORNER

Workshop Zone for children under 7, featuring a range of workshops such as Kaleidoscope, Origami, Tangram, and Ponginator.

Concourse (J)





SOLDERING WORKSHOP

Our student volunteers showcase impressive school projects, offering a firsthand glimpse into the world of STEM creativity and the power of innovation guided by budding engineers.

Concourse (L)





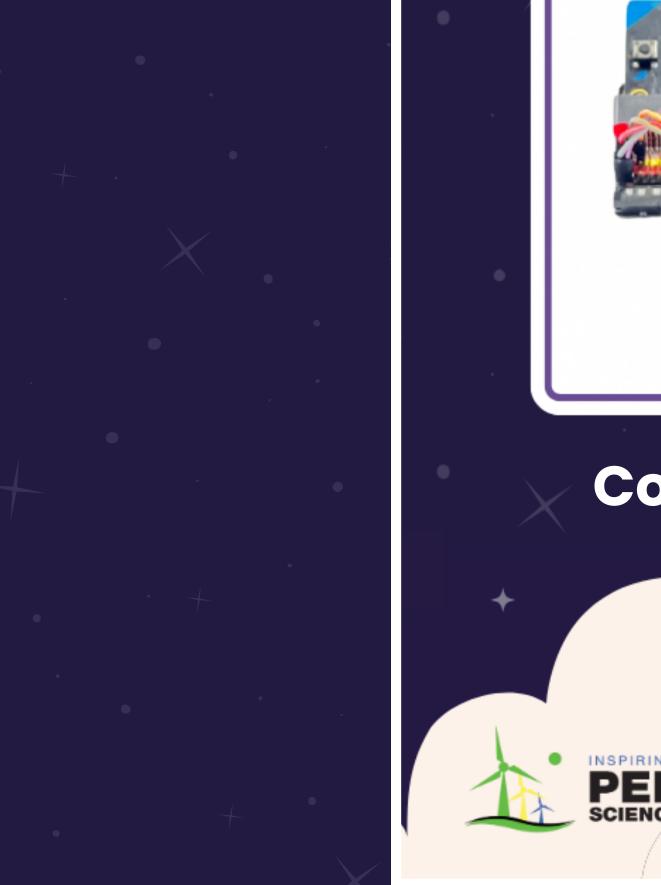




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actually change the speed of your fan with just a wave of your hand. Come and give a try!

Micro_Fan_bit is a workshop where you can learn how to make a microbit fan. We will teach you everything you need to know, from soldering to programming. Come to Micro_Fan_bit and learn how to make your own microbit fan! It's easy, fun, and rewarding.





GAMES WITH MICRO:BIT

Learn the basics of Micro:bit programming and upload your own programs to a BBC micro:bit board in this fun and interactive workshop! Participants will learn how to create their own unique projects. No coding experience necessary – this workshop is perfect for beginners



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DIY CROSSFIRE GAME

A fun activity for students to build a crossfire circuit and student can learn about the mechanisms on how the circuit works.



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w to m recycled n solving skills, ate a toy



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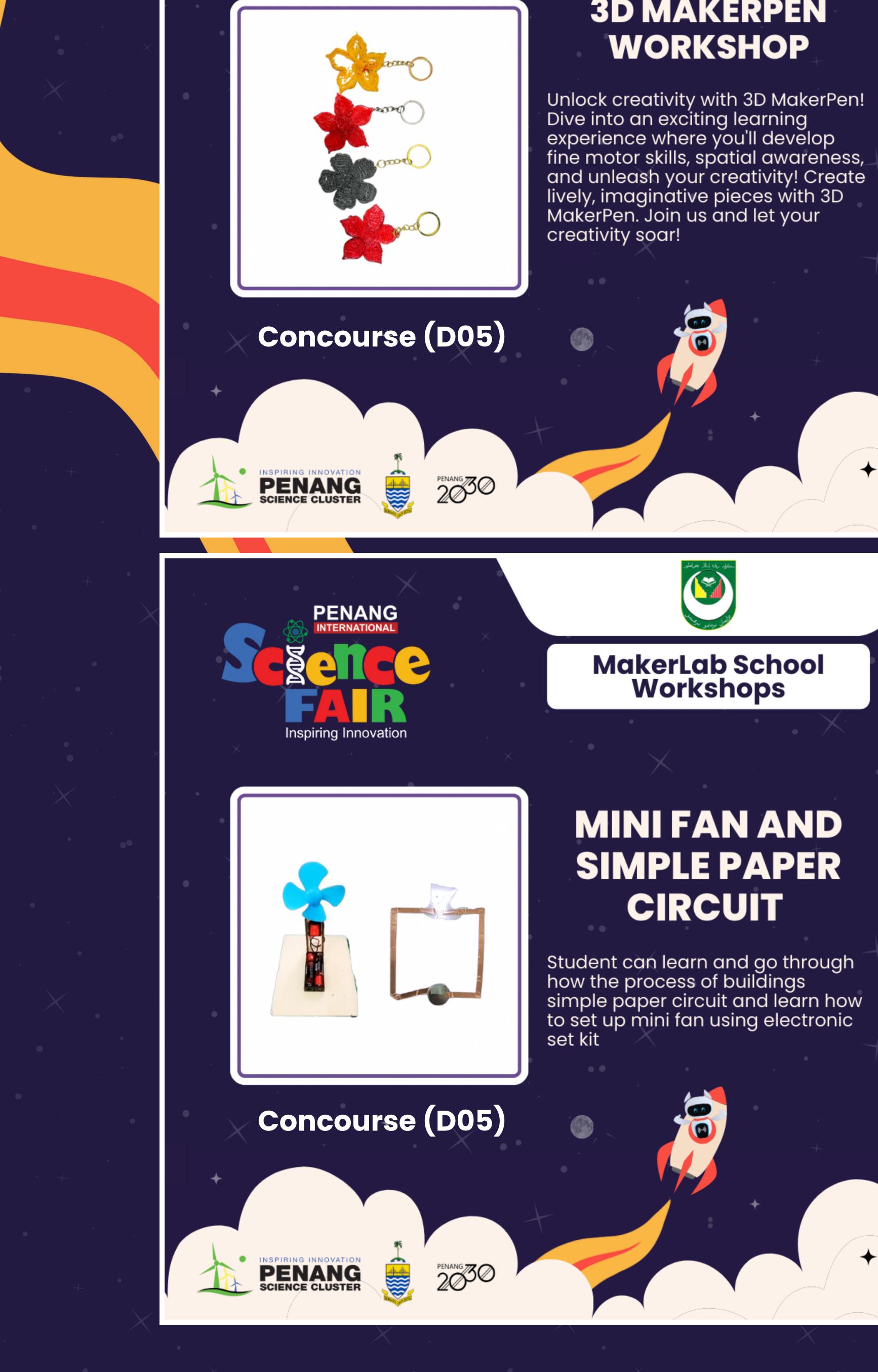
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MakerLab School Workshops



DIY LAUNCHING





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3D MAKERPEN





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BLATTARIA THE ROACH VIBROBOT

This workshop allows kids to express their creativity by building a simple robot which moves due to shaking of a DC motor which can be built using common household products and toys.





DIY MINI SLIDE PROJECTOR

This workshop provides hands-on activity where pupils will get the chance to explore the structure of a projector and how the light functions to project images on the screen.











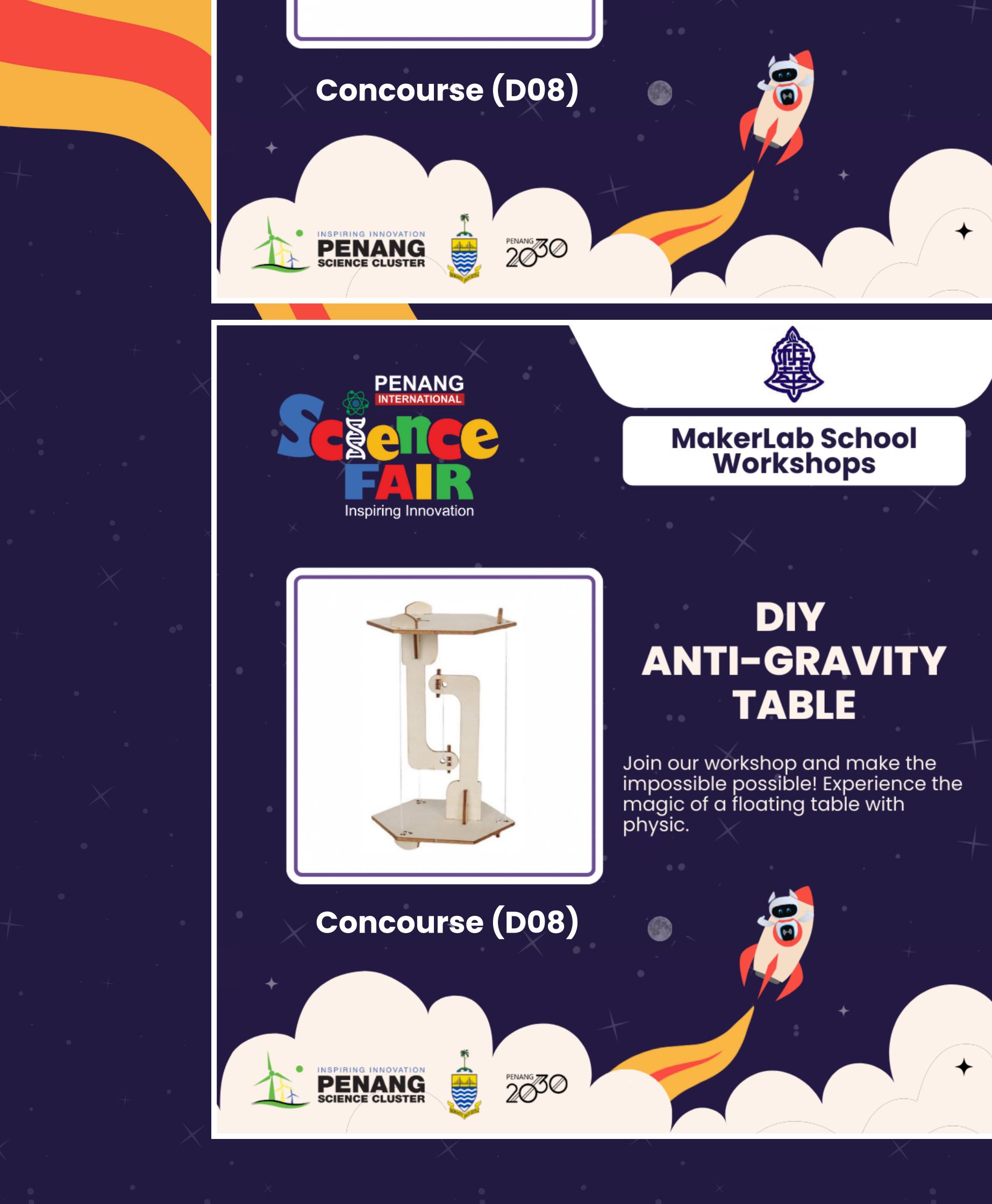


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OSCILLATING FAN AND VOICE ACTIVATED LIGHT

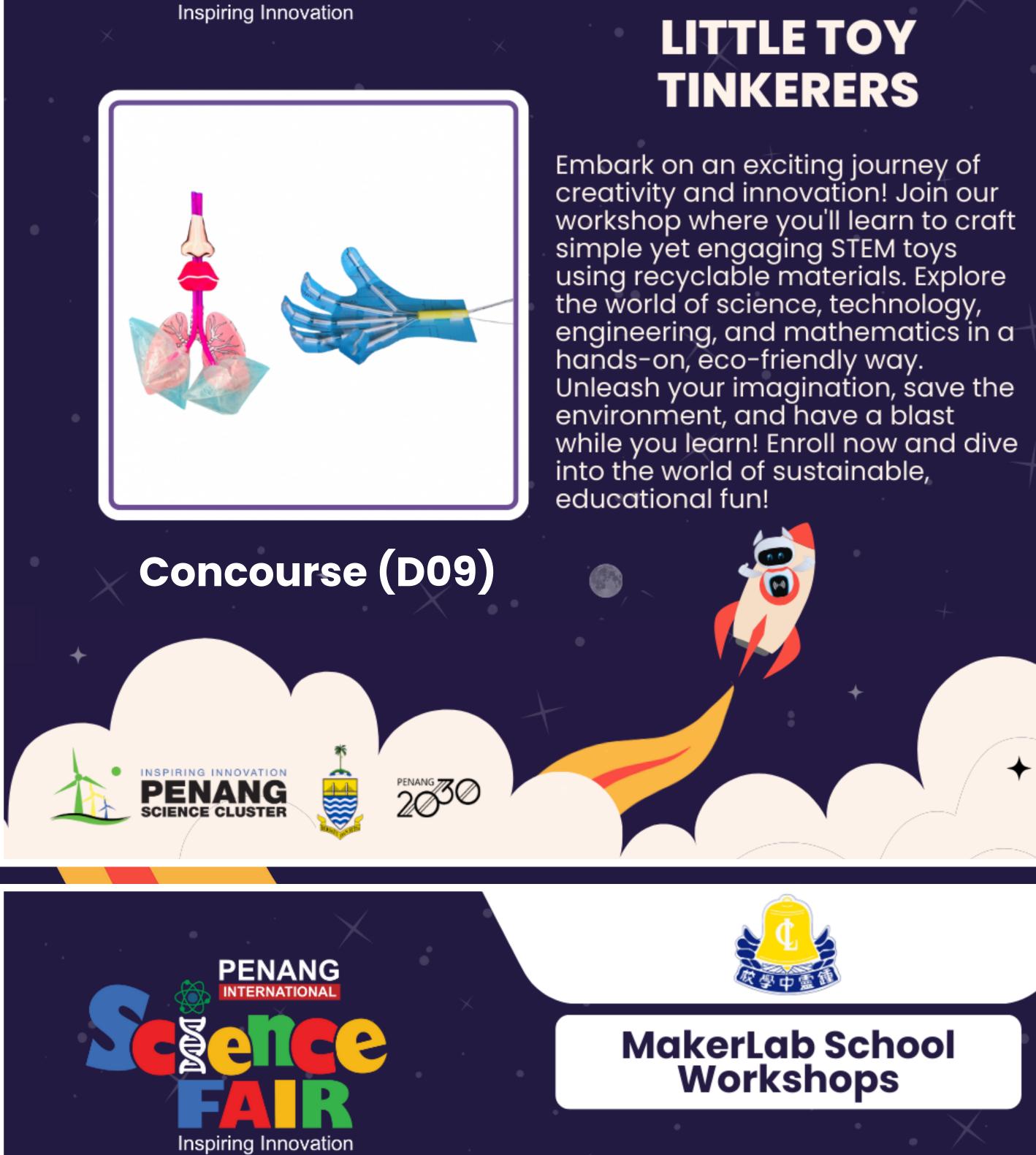
Students can build their own fan and light model while understanding the concept on voice sensor and electronic components.







LITTLE TOY TINKERERS



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MAGLEV IN THE







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MakerLab School Workshops

SOLAR POWERED CAR

A fun activity to enhance your creative and logical thinking, as well as your knowledge of building electronic circuits.



23



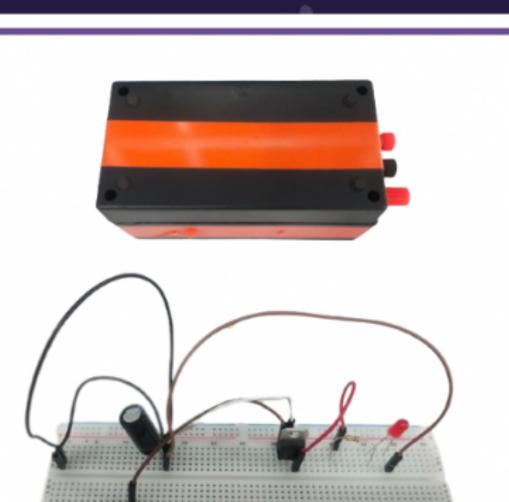
EXPERIENCE

Explore electronics!

Come and learn how to craft your very own hand crank generator that produces light and sound. Not only that, learn soldering and get yourself a mini rocket badge!







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BASIC AC TO DC CONVERTER

An exposure to safe and unsafe electrical sources for students as part of IR4.0 and AI evolution. Learn about the transformation from an unsafe mode of electrical source (AC) to the safe mode (DC) for electronic applications.



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MIRROR MAZE

Construct your own custom projector that projects your favourite images using a focused light source. As a bonus, venture into our thrilling maze and learn how a light source can be blocked (or not!) by a maze of mirrors.



LED BOARD CRAFTING

At our digital art workshop, you'll learn to engrave on an acrylic board and assemble LED components to create your very own LED Board Craft.

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5 TARNITE Makerbab









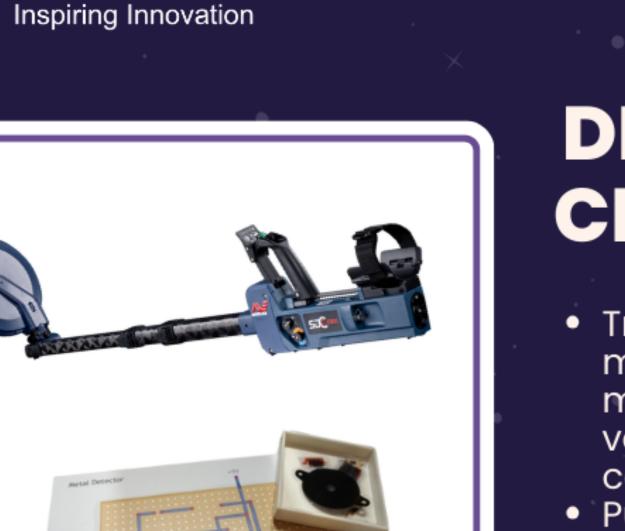
INDUSTRY EXHIBITIONS & WORKSHOPS





The Product Realization Company

Industry-Led Workshops



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METAL DETECTORS AND CIRCUIT PUZZLES

- Try your hand at the Minelab metal detector, used to find metals such as coins and gold in various types of ground conditions.
- Put your problem-solving skills to the test with circuit puzzles! Come connect the dots and place the puzzle pieces right where they



Explore the capabilities of





KEYSIGHT

Industry-Led Workshops

THEINVISIBLE POWER

- Discover the hidden power of piezoelectric discs using Keysight instruments.
 Construct an electric circuit
- capable of lighting up an LED using the power generated by a piezoelectric disc.
- Learn the importance of energy conservation and the exploration of renewable energy sources.



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Inspiring Innovation

instructions:

Short lead BLACK wire

Discover The Invisible

Power With 🗣 KEYSIGHT Instruments

annext the LED leads to piezo disc wires with suppor top

Mechanical Force -> Electrical Powe

When we preze the pieceelectric material between the 2

a be collected. This oreates an alestrical patential difference altage! that cannot be seen but only detectable by awarenest equiprent like Keysight multimater. In the arrieng list, the valuese generated by tapping the dest Rows.

a positive E regative charges

and divers this causes

it across the LED & light it up.

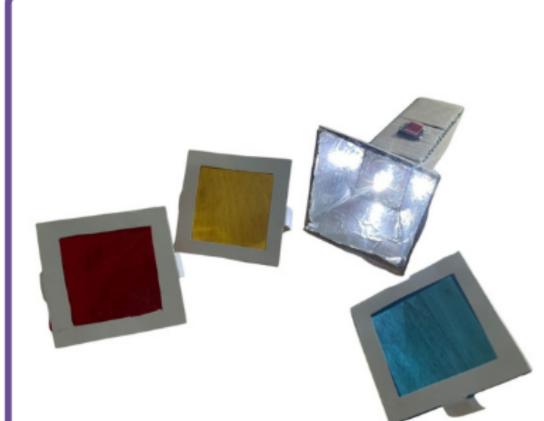
W KEYSIGHT



Industry-Led Workshops

DIY TORCHLIGHT

Create a DIY torchlight with a few basic parts! You'll discover how to build simple circuits and how light reflects!



FAAR Inspiring Innovation

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intel

Industry-Led Workshops



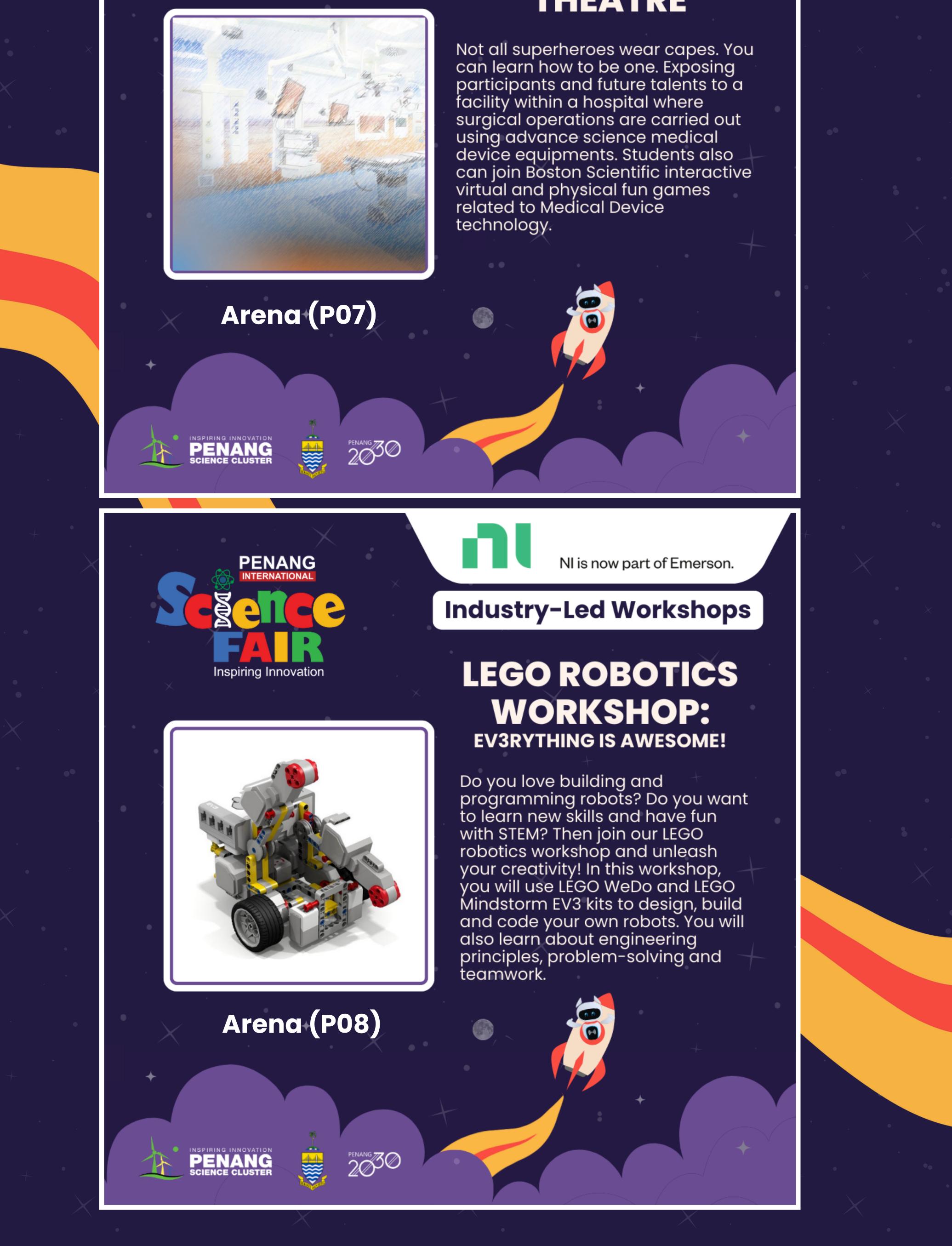
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A WORLD OF POSSIBILITIES **AWAITS YOU!**







Scientific

Advancing science for life[™]

Industry-Led Workshops



Industry-Led Workshops

LET'S BRING GREAT SCIENCE TO LIFE

Join us for some hands-on science exploration. You'll get to experiment with magnetic fluid to see how magnets can separate and purify stuff, play around with lasers to make cool patterns with sound, and learn how light helps identify things. Plus, we'll put together a vacuum chamber to see what happens when pressure changes. These activities are for all ages and levels of interest



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Inspiring Innovation

A SUSTAINABLE INNOVATION EVERYWHERE

Bosch Power Tools is proud to show





TANKTREK

- Discover the art of building your own electronic tank!
- Embark on a journey of crafting a battery-powered tank with the guidance of rubber chains and motors.



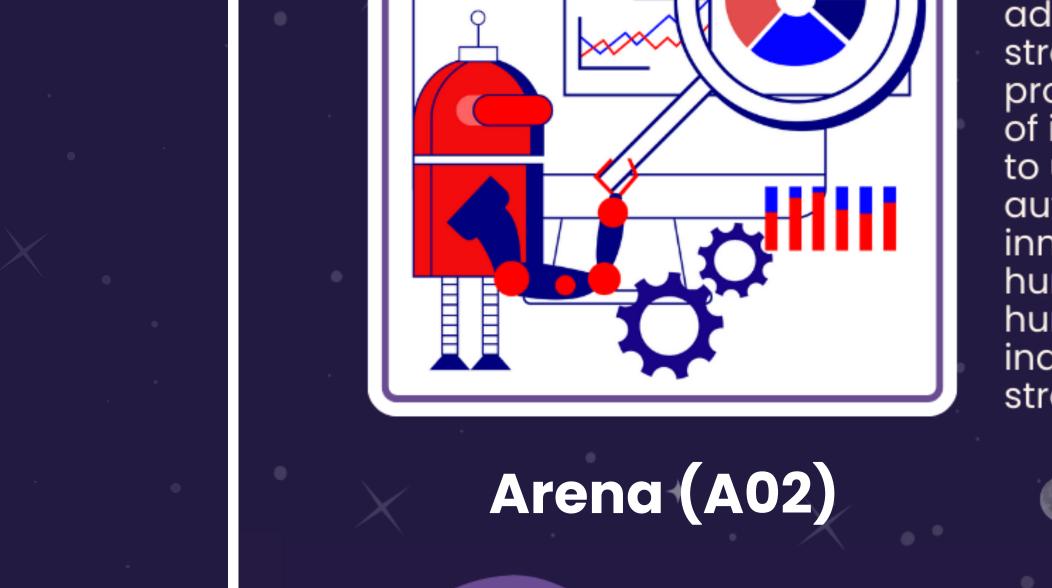
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advancements aimed at streamlining process, enhancing productivity and reshaping the way of industries operate. Explore with us to understand more about automation and discover how these innovations are not about replacing human roles but rather enhancing human potential by allowing individuals to focus on creative, strategic and high-value tasks.

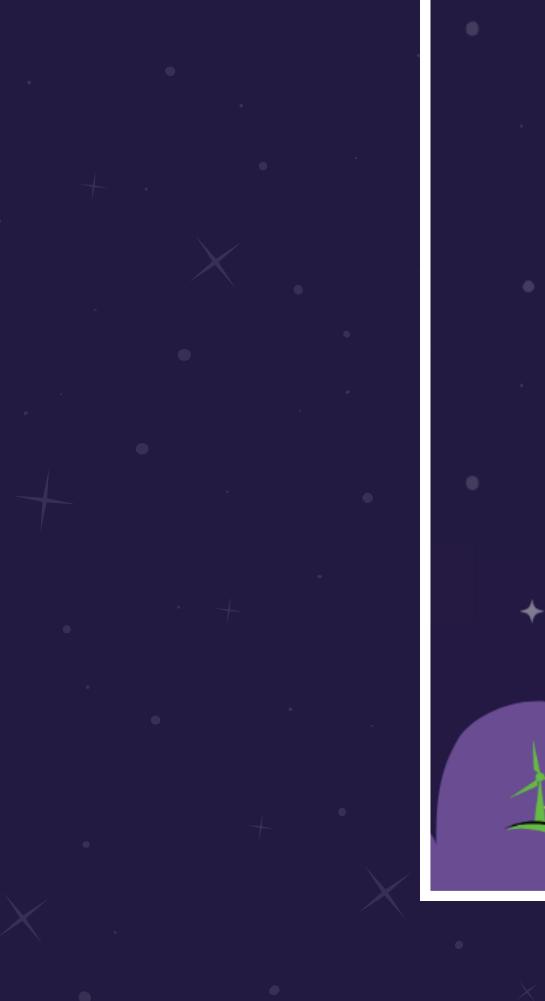


Mini-Circuits[®]

Industry-Led Workshops

MINI-CIRCUITS: **3D PRINTED LED TABLE LAMP**





explore the impact of different filter media on the outcomes of water purification.

Arena (A04)

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INSPIRING INNOVATION PENANG



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Industry-Led Workshops

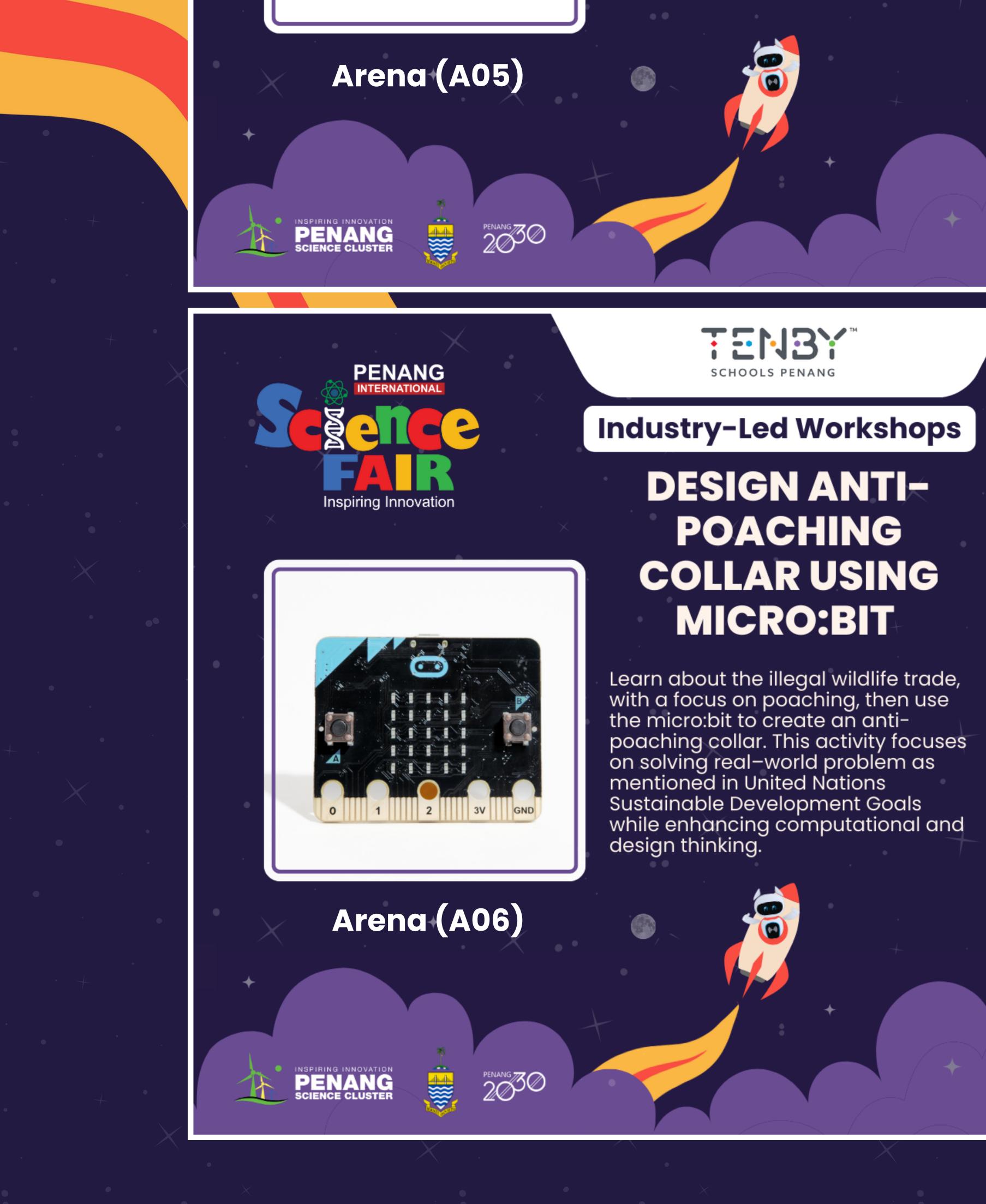
VOICE **ACTIVATION CAR**

Interacting with things around us using voice control has become a growing trend in our lives. Through this workshop you may have fun to build a proto car that moves with sound with the application of microphone. Come and join us on an exciting adventure to create your own Voice Activation Car!

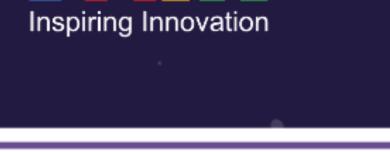


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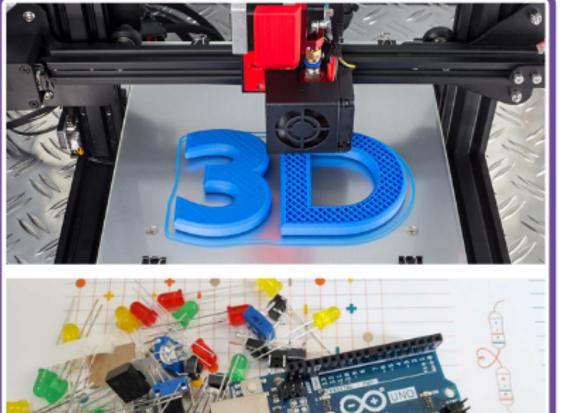






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THE POWER OF 3D PRINTING AND MICROCONTROLLER

- 3D Printed jet engine This concept involves creating a fully functional miniature jet engine using 3D printing technology.
 LED Cube with Arduino UNO This
- LED Čube with Arduino UNO This interactive display can be programmed to create mesmerizing light patterns and animations.



STEM 4.0

Industry-Led Workshops

EXPERIENCE SCIENCE IN ACTION WITH PENANG STEM GROUP

- Explore a wide range of fun hands-on STEM learning programs like VR, Robotics, Sensing the Future, Math & Logic puzzles offered by our STEM Centres!
- Get ready to embark on a science-filled adventure!
 Experience a world of wonder,



5d

Digit

PENANG

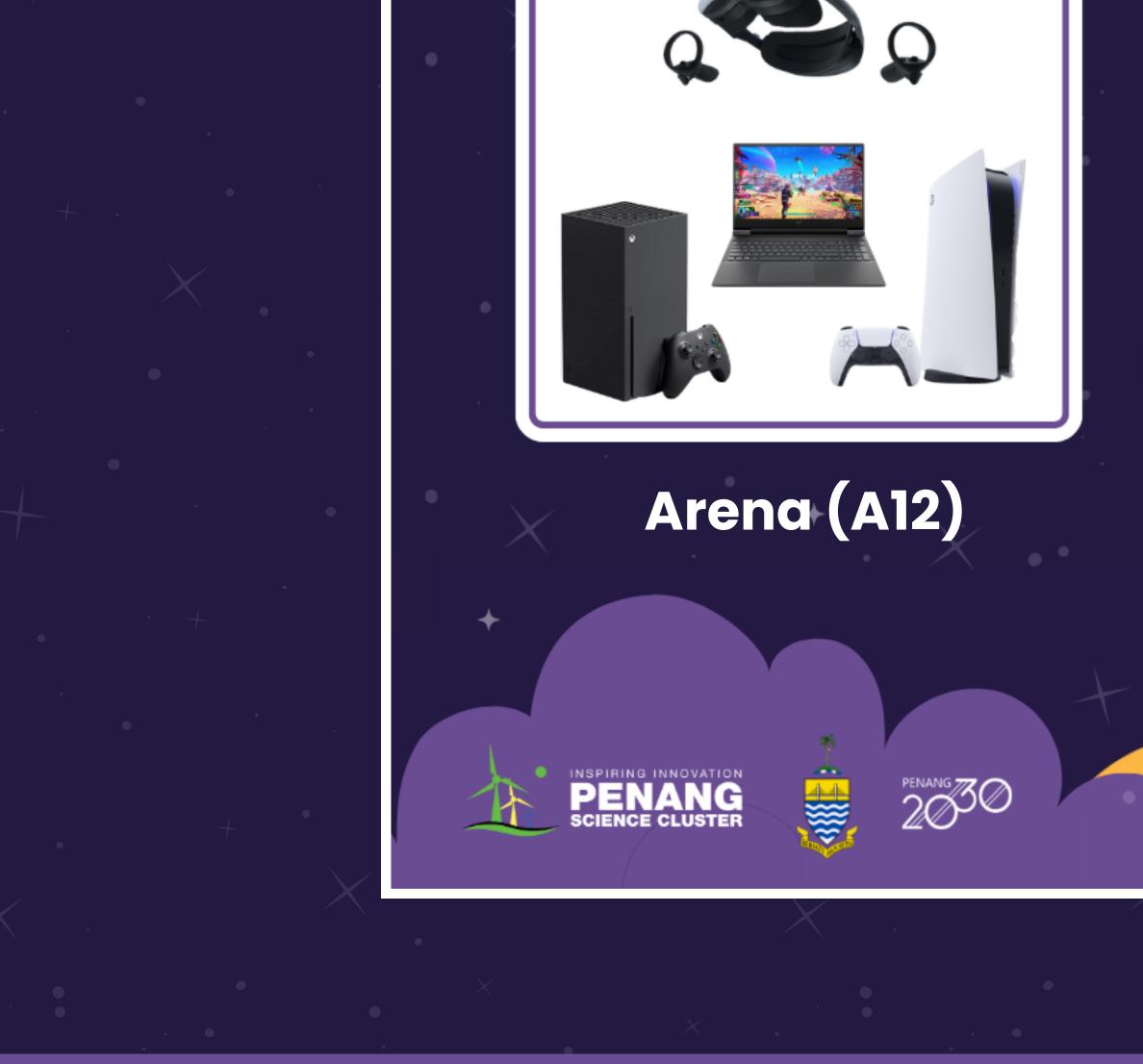
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STEM

Inspiring Innovation

ADVANCED MICRO DEVICES

 Experience the Future: Witness the power of AMD technology with the latest PlayStation, Xbox,



- and high-performance gaming laptop.
- VR Zone: Immerse yourself in the world of Virtual Reality with the cutting-edge HTC VIVE VR set, powered by AMD.
- Gaming Extravaganza: Test your skills and challenge your friends in a variety of exciting games available at our booth with goodies to be won.

JABIL

Industry-Led Workshops

BRISTLE BOT

Get ready for a captivating do-ityourself journey with Bristle Bot, where you'll witness the mesmerizing jiggling effect created by motor and engine vibrations as they come to life before your eyes!

<image>

PENANG

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Smith-Nephew

Industry-Led Workshops

<text>





WIND ENERGY **AND MAGIC OF** MOLECULAR GASTRONOMY

- measured.





Can you make an LED flash with just a copper coil? Unleash your inner





Swisspac[™]

Industry-Led Workshops

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LEARNING WITH THE INTELLIGENT

and learners will explore the integration of intelligent classroom solutions that harness the power of technology to enhance the learning



UNLOCK YOUR SUCCESS WITH **TELEBORT!**

- Telebort leads with outstanding
- Instructors and top technology.
 Experience the latest knowledge and hands-on projects.
- Telebort offers flexible hybrid learning, adapting to your lifestyle with both online and in-person classes.
- Learn at your own pace the future of education is here!



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HUNYUAN DEMY Wellness Warriors

Industry-Led Workshops

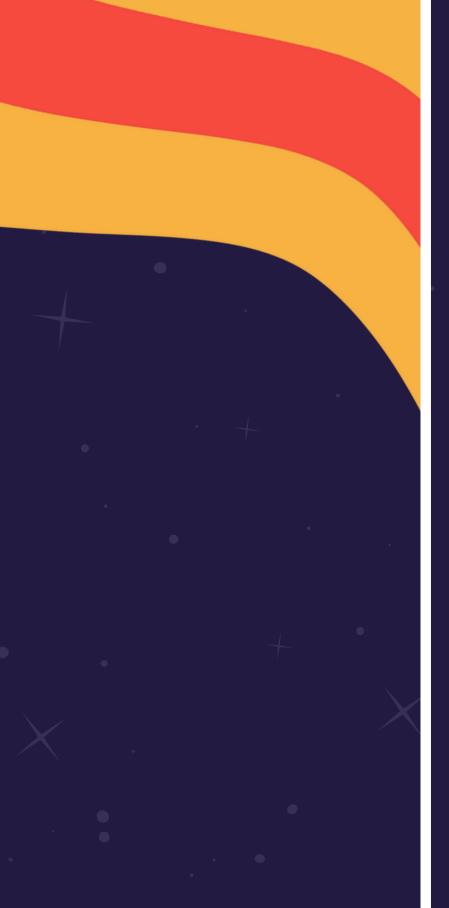


PENANG INTERNATIONAL











STARLAB PLANETARIUM

Embark on a cosmic adventure within the Inflatable Planetarium, a within the Inflatable Planetarium, a portable marvel that envelopes participants in a captivating universe of projections and interactive learning. This immersive experience, adaptable to diverse settings, unfolds the wonders of the cosmos, guided by trained educators. Beyond its educational impact, the Inflatable Planetarium serves as a catalyst, sparking curiosity and fostering a lasting appreciation for the beauty and mysteries of space in individuals of all ages.

Concourse (Dome)

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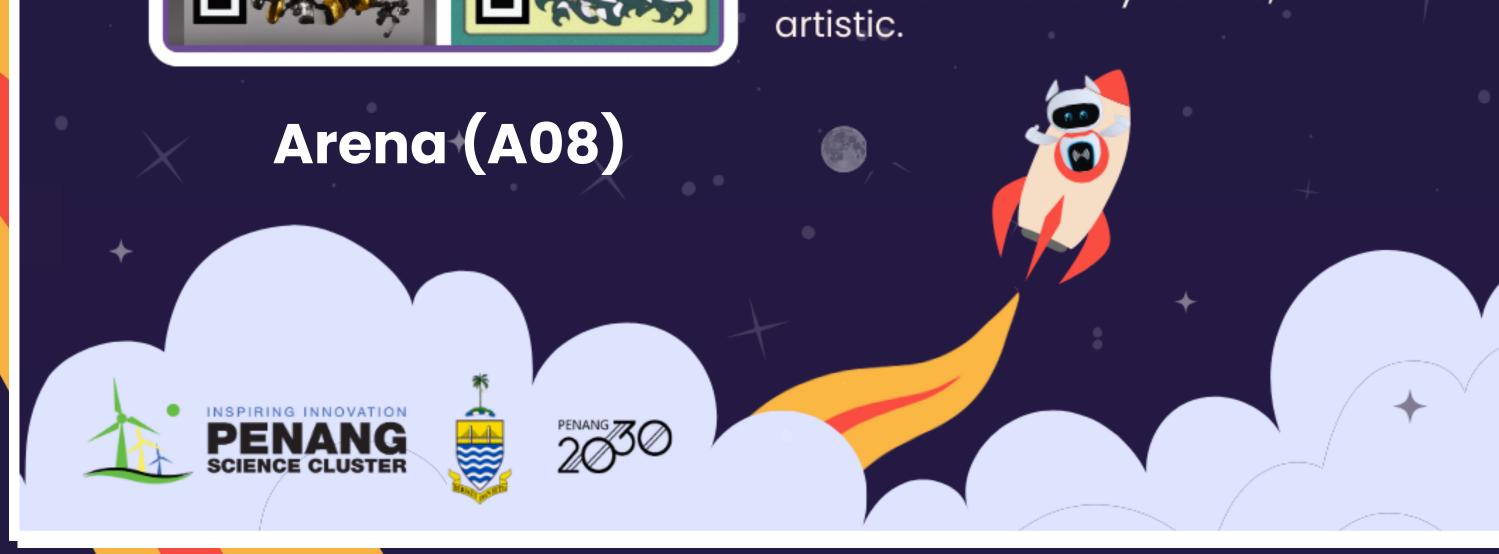
ROBOTICS WITH LEGO SPIKE





AI ART TO GENERATE QR CODES

Want to learn a practical cutting edge use-case for AI generated art? Come test our our machine learning powered art generator powered by Stable Diffusion. We will introduce the general concepts behind how this particular machine learning model translates words into pictures, and use a programmable interface to make it generate QR code that is not only usable, but





PSC-LED Workshops

ATC-ON-WHEELS

Immerse yourself in a world of cutting-edge technology and captivating exhibits at our ATC-on-Wheels booth. Prepare to be amazed as you explore a multitude of high-tech displays and engage in thrilling STEM activities. From the fascinating realm of microscopy to the limitless possibilities of 3D printing, from the intricate workings of neuroscience to the mindbending realms of augmented and virtual reality as well as the aweinspiring field of robotics, this program is designed to ignite your curiosity and spark a lifelong passion for discovery.





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PSC-LED Workshops

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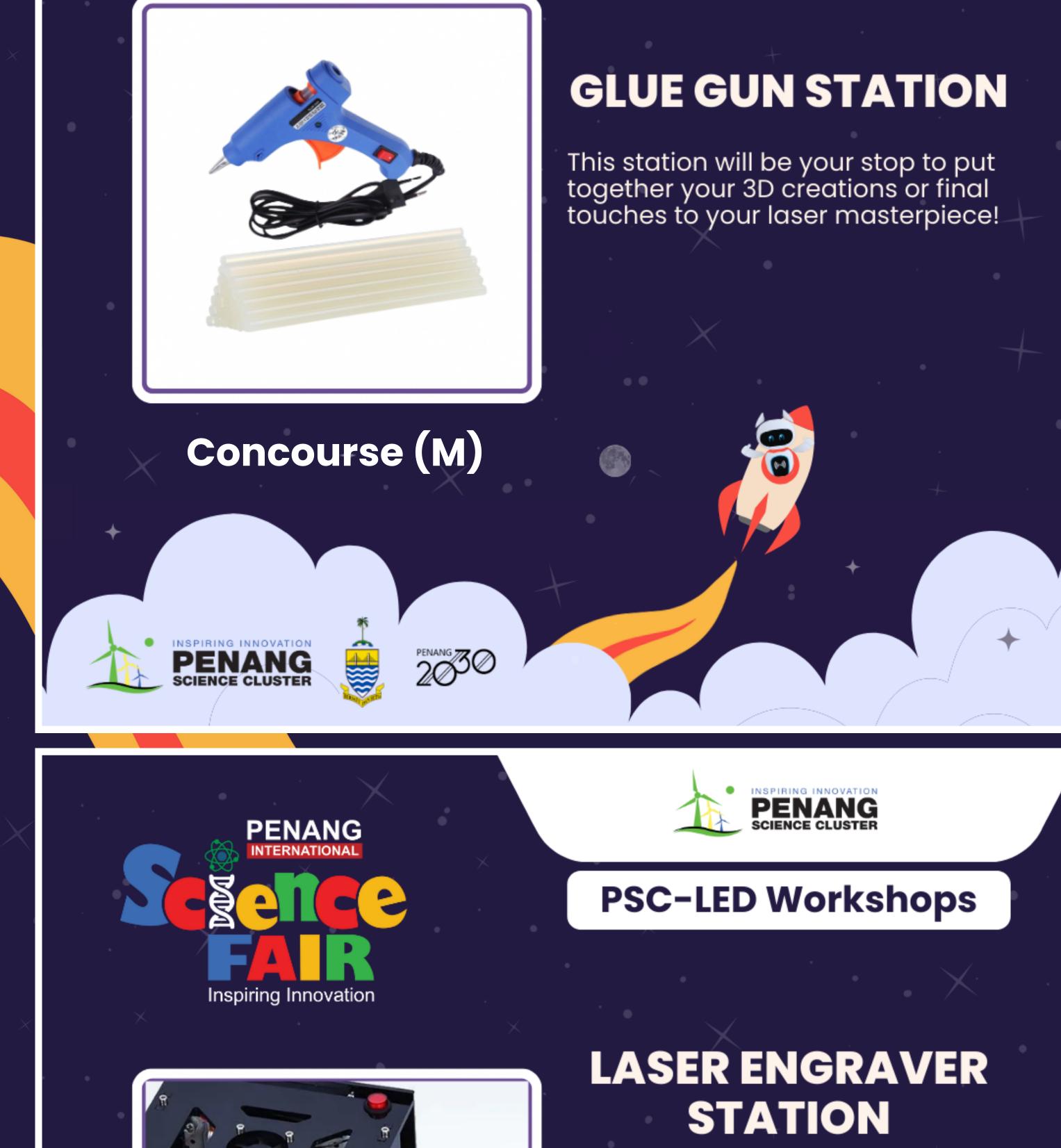
ATC-ON-WHEELS

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Hey, creative minds! Step into the world of laser excitement at our Laser Engraver Station, where you turn ordinary things into extraordinary masterpieces. It's not just a station; it's a place for kids where to create super cool art and craft with lasers.







PENANG

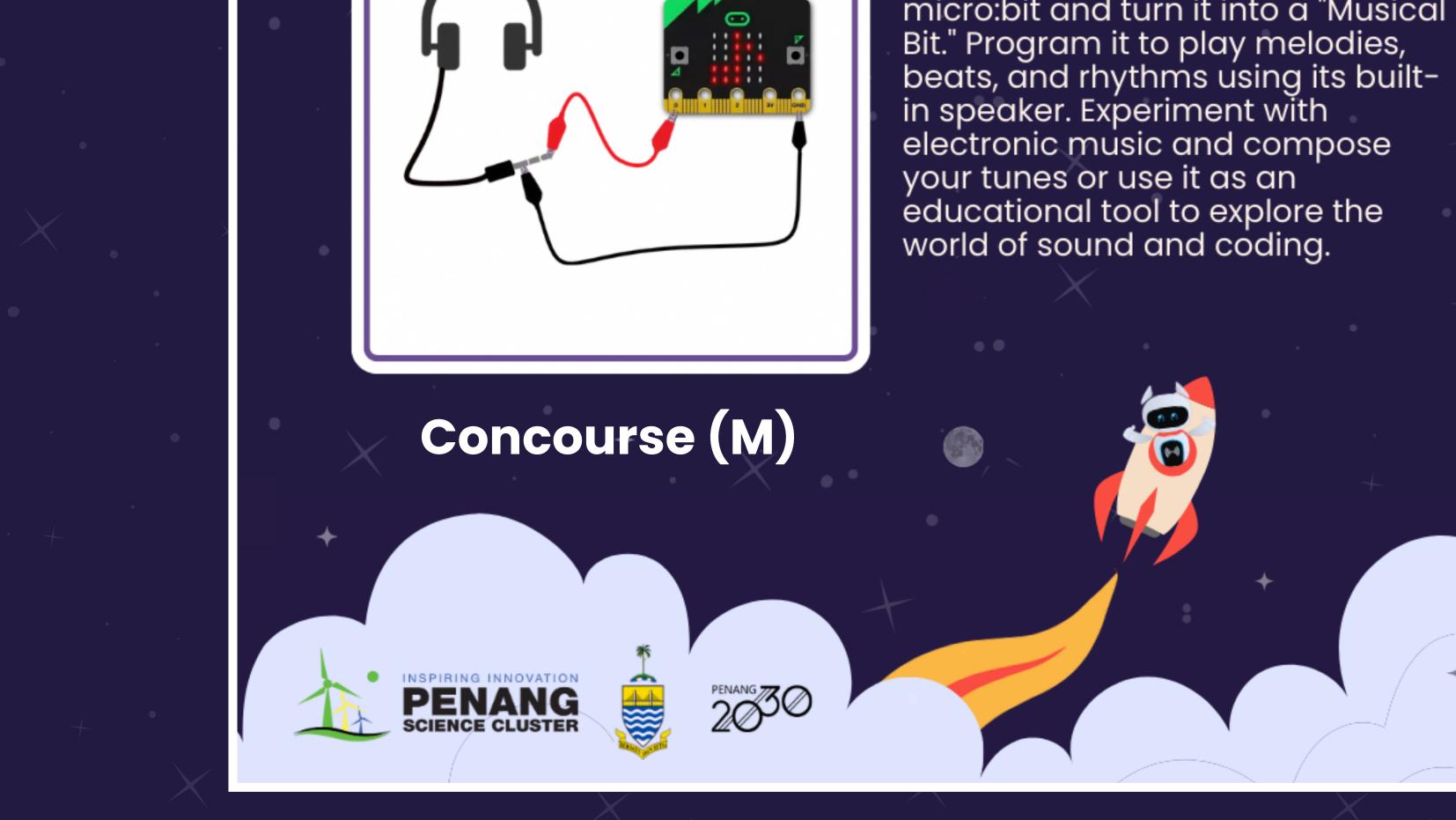
SCIENCE CLUSTE

MOOD BADGE

With micro:bit, you can create a personalized "Mood Badge" that displays your current emotions with an LED matrix. Easily program different emojis or icons to represent your mood and wear it as a badge on your clothing or backpack. Express yourself in a fun and tech-savvy way!



Unleash your creativity with micro:bit and turn it into a "Musical







PENANG SCIENCE CLUSTER



MICRO:PET

Discover the diverse higher





ADVISERS

Arena (A18)

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education opportunities in the United States at the EducationUSA booth. Chat with our friendly advisers, have a blast with our interactive puzzle map, and be sure to experience our thrilling VR campus tour for an immersive taste of U.S. campuses!















MAKEIT. USE IT. PLAY IT.

Activities for the young and old! Science and art come together in the true STEAM tradition. Create collectibles and science projects that you can take home to use or play with. These activities are suitable for anyone aged 6 to 60, including keychains, a simple 'Gasing,' birdfeeders, catapults, smartphone stands, and more.

Wood Working Area

INSPIRING INNOVATION

<image>

SHARE YOUR PISF 2023 MOMENTS WITH US & BE PART OF THE EXCITEMENT.







INSTAGRAM

@pscpen

#PenangInternationalScienceFair #PISF2023