



# ICT TIMES

12th Edition



<b><u>ICT Society Events</u></b>	<b><u>Special Interest Groups</u></b>	<b><u>Upcoming Events</u></b>
<b>Freshmen Orientation Camp (FOP)</b>	<b>ASIG</b>	<b>REDCamp 2023</b>
<b>ICT Graduation 2023</b>	<b>Amphibi</b>	<b>Open House 2024</b>
<b>World Skills Asean</b>	<b>GIT</b>	<b>Training for FOP 2024</b>
<b>Inter-School Games</b>	<b>NullSec</b>	
<b>Investiture 2023</b>	<b>Orion</b>	
<b><u>Other ICT Events:</u></b>	<b>Overflow</b>	
<b>OIP Shenzhen</b>	<b>PVSIG</b>	
<b>OIP Vietnam</b>	<b>The Dot</b>	
<b>YEP Klang</b>		



ICT SOCIETY

EVENTS

# FRESHMEN ORIENTATION CAMP

12th to 14th April 2023

With a mix of online and in-person activities, the freshmen of 2023 interacted with their classmates and their student advisors, who will be journeying with them through their years in NP, through various bonding games led by Group Leaders (GLs) and Game Masters.

Throughout the three days, students participated in activities that inculcates the values of Ngee Ann Polytechnic, Respect, Responsibility, Resilience, Integrity, Compassion, and Gratitude (R3ICG) as they got to learn more about one another and the new school environment.

Our student helpers who graciously volunteered their time to countless training sessions executed the event to the best of their abilities and shared their experiences and knowledge to the incoming freshmen wholeheartedly. The School of ICT has never been more vibrant with these students bringing their energy with them as they cheered and supported each other throughout the Orientation Programme, leaving the freshmen with a heartwarming experience.



Organised by ICT Society

# ICT GRADUATION CEREMONY 2023

2nd May 2023



Our ICT Society students, always enthusiastically serving our community, here as ushers during the ICT Graduation Ceremony 2023, our first full scale graduation, since COVID.

Their dedication and teamwork ensured a well-run event at NP Convention Centre, creating a memorable experience for graduates and guests alike.

Supported by ICT Society



# WORLD SKILLS ASEAN

23th to 25th July 2023

In July, over 100 students volunteered to help out in World Skills Asean that was held at Suntec Convention Centre. These students had a role in ushering the secondary school student visitors, and a few students from Data Science volunteered under Salesforce. The said ushers brought the different secondary school students around to different sharing sessions held by several companies of different industries and walked them through booths set up by various organisations and agencies. It was an enriching event for all!

Supported by ICT Society



# INTER-SCHOOL GAMES

24th July to 4th August 2023



ICT students participated in the annual Inter School Games in August 2023. We sent out teams to compete in 6 sports: 7-A-Side, Floorball, Captains Ball, Volleyball, Bowling and Badminton. All of our teams enthusiastically participated and clinched first in Volleyball and Captain's Ball. Each team gave their utmost commitment and teamwork despite everyone having different schedules, and was placed second overall among the 8 academic schools in NP.



ICT Teams organised by ICT Society







# SIG EVENTS

AI SIG



# THE PLOTLY PLAYGROUND

June 2023

The workshop kicked off with an engaging bonding activity, creating connections among participants who shared common passion for Data Science. As the event unfolded, attendees discovered the wealth of benefits that Plotly brings to data visualization. Plotly's interactive features took center stage, allowing users to craft visually stunning graphs and charts that respond to user interactions. Attendees learned how to implement interactive buttons and dropdown menus, effectively transforming their visualization into dynamic tools that can be filtered and customized.

After attending the workshop, participants walked away with valuable take-home pointers. They gained a deeper understanding of the Python library Plotly and its vast potential for data visualization. The knowledge acquired during this workshop can be readily applied to future assignments or projects, equipping attendees with a powerful tool to convey data insights effectively.

This event showcased Plotly's power to make data come alive and set the stage for an exciting semester ahead filled with opportunities to harness the full potential of data visualization.



## THE PLOTLY PLAYGROUND



Do you want to discover how to visualise data in a fun and engaging way?

Join us at our workshop where creativity and data collide!

Top 3 entries submitted by 2 July stand a chance to win thrilling prizes worth up to \$150!

21st June  
12:00PM - 6:00PM  
27-05-10

Sign up NOW!



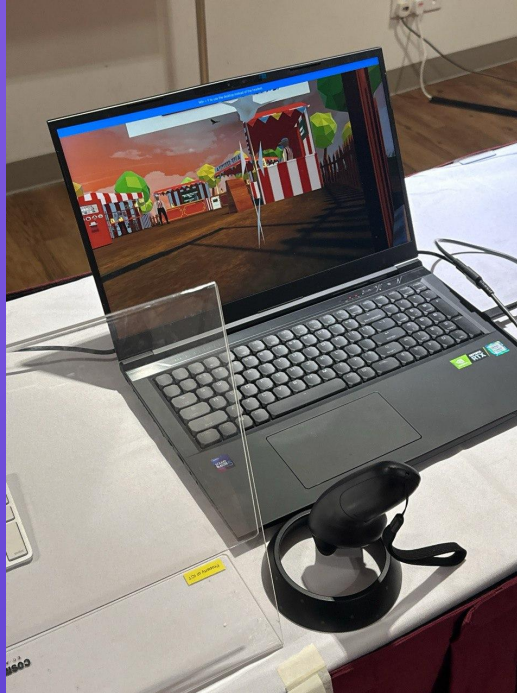
# AMPHIBI STUDIO



# The ICT SIG Fiesta 2023

13th & 14th of April 2023

The ICT SIG Fiesta 2023, a celebration of technology and innovation, was held at Venue 27-05-01, 11, and 12. Hosted by the CCA (Co-Curricular Activity) Amphibi, this event brought together tech enthusiasts for an exciting journey into the world of virtual and augmented reality. At the heart of the Fiesta, Amphibi showcased its prowess with a VR Station and an AR Station featuring the Mario Kart AR Toy.



Participants and students had the opportunity to immerse themselves in the wonders of these immersive technologies, experiencing the fusion of the virtual and physical worlds.

Organised by Amphibi studio



# GAME WORKSHOPS

21 August & 7 September 2023

Amphibi's first game workshop took place on August 21. During this first workshop, it was mostly an introduction to Unity for year 1 students. Unity is a powerful game development platform that uses the C# programming language. It enables developers to create games and interactive experiences across various platforms. After learning the basics of Unity, participants proceeded with the creation of the Flappy Bird game. Due to time constraints, progress had to be halted for the next session.

In this session, there was a lively ice-breaking session where participants used the Gartic Phone site to draw and guess sentences. Everyone had a blast and fun time playing it. This event added a warm and enjoyable dimension to the workshop, highlighting the participants' keen interest in learning Unity. The Unity Workshop - Amphibi (Follow Up) on the same day continued the development of the Flappy Bird game and provided a deeper understanding of Unity. By the end, everyone had successfully created their first Flappy Bird game, marking a significant achievement in their game development journey.



Organised by Amphibi studio

GIT



GIRLS IN TECH | POLYTECHNICS @ SG

# NCS OPEN HOUSE

15th June 2023

At that event, NCS unveiled their newly renovated NCS Hub and showcased how they worked, learned, and innovated together to make the extraordinary happen. The girls were taken on a journey around NCS Hub and Tesseract, where they could get hands-on with NCS' latest technological advancements and gain valuable insights into how they tackled real-world challenges. It was an excellent opportunity for our girls to connect with the leaders and explore exciting future career pathways.



Attended by GIT



# ACCENTURE COACHING PROGRAM

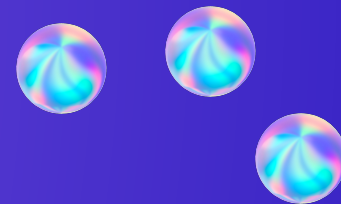
28th August 2023

At the Accenture Coaching Program launch, the girls embarked on a transformative journey of personal and professional growth. Experienced leaders at Accenture shared invaluable insights and experiences, fostering an interactive and engaging atmosphere. Beyond acquiring knowledge, the event built a strong support network for these future professionals. It also presented exclusive internship and career prospects at Accenture, opening doors to a promising future. The 6-month program aims to empower these women with new skills, self-assurance, and the motivation to excel in the dynamic business world. It's the beginning of their remarkable journey towards personal and professional success.



Attended by GIT

# ENSIGN INFO-SECURITY OPEN HOUSE



26th August 2023



The event provided an invaluable opportunity for students to delve into the world of cybersecurity. Students gained knowledge and insights that broadened their horizons and illuminated the diversity of career options in cybersecurity. Engaging in discussions and hands-on activities on topics such as Penetration Testing, Data Science, and Cyber Trust deepened our understanding of the field's complexities.

Ensign Info Security's remarkable expertise and contributions to the cybersecurity domain left a lasting impression as the students were amazed to learn about the numerous companies and applications that have benefited from their services.

Attended by GIT

# NEW RELIC WORKSHOP (OBSERVABILITY INTRODUCTION - ABOVE THE GLASS)

14th July 2023

During the event, we seized the opportunity to explore and learn from the APJ Developer Evangelist and Steve Ng, who generously shared insightful reflections with us.

The event offered a valuable learning platform for students who were interested in gaining an understanding of the job scope of a DevOps SRE Engineer. It encouraged attendees to reflect on the customer journey, enabling them to acquire a deeper appreciation of its significance. Additionally, we delved into how businesses had previously harnessed Observability tools in real-time, igniting thoughtful contemplation among participants.



Attended by GIT

# iZeno x Logicalis Speed Mentoring

5th October 2023

This event provided girls the opportunity to hear from industry professionals and gain insights into current technological trends, employers' expectations, and strategies to develop their skill set as the next generation of tech professionals. It served as a platform to ask their pressing questions, seek guidance, expand their professional network, and hear about the vast opportunities available.

Throughout the event, the girls also engaged in candid discussions with the professionals to learn about the diverse roles and opportunities present in the tech space and how to effectively utilize their time in polytechnic to prepare themselves for the working world.



Attended by GIT

NULLSEC



NULLSEC

# Youth Cyber Exploration Camp (YCEP)

12th to 14th June 2023 & 19th to 21th June 2023

YCEP, also known as Hack N' Flag, is an annual 3-day training program hosted by NullSec and sponsored by the Cyber Security Agency (CSA). This year, NullSec decided to host two sessions to engage more secondary school students and kindle their passion for cybersecurity.

The camp began with two days of intensive workshops and informative talks covering topics such as Cryptography, Python, Image Forensics, and Web Exploitation, which form the fundamental building blocks of cybersecurity.

These sessions were all in preparation for the culminating event on the final day, a mini Capture-the-Flag (CTF) competition featuring challenges crafted by NullSec. Participants applied both their existing knowledge and newfound skills to solve various challenges over five hours, accumulating points for their teams and competing for victory.

As the day concluded, teams fiercely compete for points, and our aspiring hackers wrapped up the boot camp with a lasting and enriching experience.



Hosted by Nullsec



# ***DARKTRACE CRASH COURSE***

*24th May 2023*

With Ngee Ann's new implementation of Wednesday Without Walls (W3), NullSec was able to use this opportunity to attend a crash course on Darktrace. In this crash course, we learnt more about how the power of AI can be used to assist in cyber investigations.

# ***KOREAN DELEGATES SHARING SESSION***

*25th July 2023*

During whitespace week, a delegation of Korean lecturers visited the Cyber AI Centre at Ngee Ann Polytechnic to explore the latest cybersecurity developments and gained a deeper understanding of the educational programs offered by the School of ICT.

NullSec's presentation not only highlighted immediate cybersecurity concerns but also showed how advanced technologies like Darktrace could revolutionize academic studies and investigations.

Hosted by Nullsec



ORION

The logo features the word "ORION" in a bold, black, sans-serif font. The letter "O" is replaced by a stylized compass rose. Below the name is the tagline "PLAN AS ONE. EXECUTE AS ONE." in a smaller, all-caps, sans-serif font. The logo is centered on a white rectangular background that overlaps a purple background with various digital icons like a browser window, a list, and a funnel.

**ORION**  
PLAN AS ONE. EXECUTE AS ONE.



# EAE Experience

18th & 27th May 2023

In May, the School of Infocomm Technology hosted the EAE Experience event, which was open to secondary school students and their parents. This event was designed to provide further insight on the respective diplomas offered. It was split into two segments on different dates, 18th and the 27th of May.



On the 18th, parents and students were given a short tour of the school, visiting the classes to attend talks given by our student volunteers on their experiences in their diploma. On the 27th, the school hosted a talk with the same student volunteers, which was carried out on a QnA basis. The secondary school students were encouraged to ask questions on the different diplomas and experiences offered by the school.

Supported by Orion

# ICTXplore

7th to 8th September 2023

Throwback to our recent outreach event, ICTXplore! ICTXplore was a 2-day event where secondary school students were taught more about IT and Cybersecurity, such as Kali Linux, Cryptography, and Python. The workshop was followed by a social media challenge and a competition where students participated in games and Capture-The-Flag to uncover the mystery behind the death of Agent YL.

Organised by Orion



**OVERFLOW**



**OVERFLOW**

# SIG FIESTA

13th April 2023

SIG Fiesta was held on 13<sup>th</sup> and 14<sup>th</sup> April to introduce ICT's Special Interest Groups to new Year 1s. During those two days, Overflow had a booth that showcased a few projects developed by our members: an OpenCV finger tracker to showcase computer vision, a Rubik's cube solver using LEGO® MINDSTORMS® to show robotics, and an IoT-controlled robot to show the combination of hardware and software can work together to create interesting and useful solutions.



# WELCOME PARTY

5th May 2023

Overflow's Welcome Party was held on 5<sup>th</sup> May to introduce new members to Overflow. During the party, new members played games, forged new bonds, and were introduced to Overflow's culture, lecturer-in-charge, and other EXCO members.



Organised by Overflow

# OVERFLOW NULLSEC COLLABORATION (GIT & GITHUB WORKSHOP)

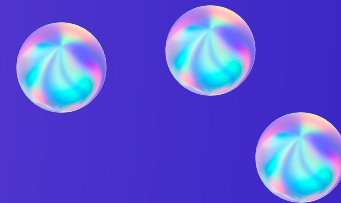
NullSec and Overflow collaborated on their first <sup>12th May 2023</sup> workshop of the year to teach members about Git and GitHub. GitHub is an essential platform for developers that provides a place to store their code, track changes to it, and collaborate with others on projects. The workshop covered how students can use Git locally together to create and collaborate on code.



Organised by Overflow /NullSec



# OBJECT-ORIENTED PROGRAMMING WITH PYTHON



1st June 2023

During this workshop, participants explored Python programming language through object-oriented programming (OOP), a programming technique that utilizes classes to model data that can be used as objects in code. These objects can then be used to execute tasks, instructed by the programmer.



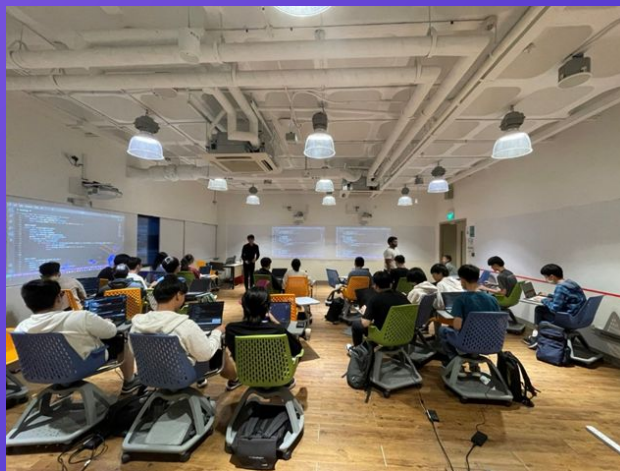
Organised by Overflow

# DISCORD BOT PART 1 & PART 2

7th & 14th July 2023

Part 1 - Participants were introduced to creating bots for the social messaging platform Discord. Bots help complete small specific tasks, making them a great fit for a platform like Discord. The first of two parts, participants dived into the world of bot development, starting with basic command handling, mastering slash commands, and understanding event handling.

Part 2 -Building onto the first workshop, participants were introduced to embedding, moderation, and API utilization. This new knowledge was then used to enhance the capabilities of the bot they created during the first session.



Organised by Overflow

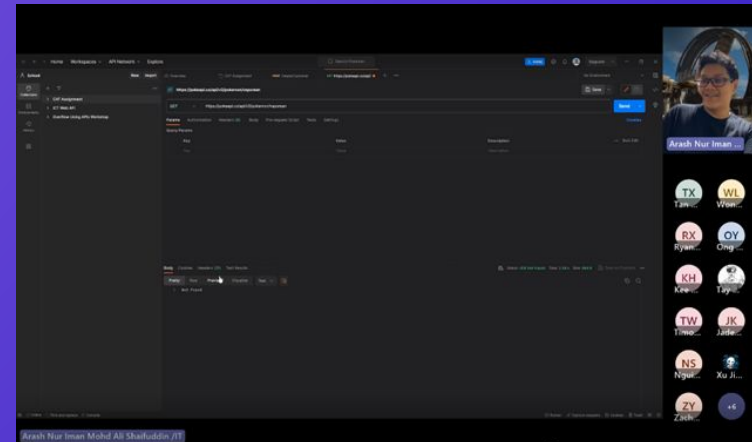
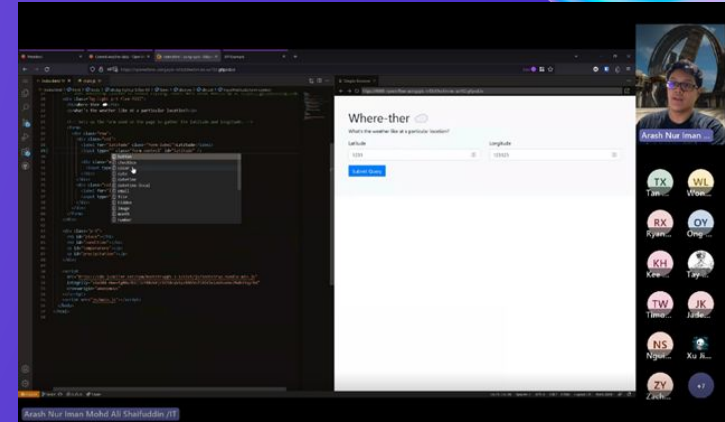


# USING API & MAKING API

4th & 18th August 2023

**Using API** - Participants were introduced to APIs, which are a set of rules and protocols that have a defined structure. In the workshop, they learnt about the different types of APIs, and how to authenticate and authorize with APIs and API testing tools. Additionally, they applied this knowledge in the practical segment of the workshop.

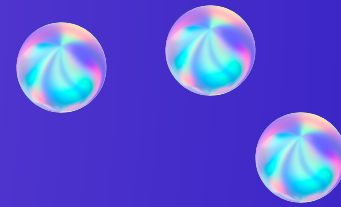
**Making API** - Participants were introduced to APIs, which are a set of rules and protocols that have a defined structure. In the workshop, they learnt about the different types of APIs, and how to authenticate and authorize with APIs and API testing tools. Additionally, they applied this knowledge in the practical segment of the workshop.



Organised by Overflow



# DATA STRUCTURES AND ALGORITHM BOOTCAMP



9th to 11th October 2023

During the last week of the semester break, Overflow organised a 3-day Boot Camp on Data Structures and Algorithms. The first day covered topics like Introduction to DSA, a recap on OOP, Big-O notation, and Linked Lists.

On the second day, members were further introduced to more data structures such as stacks, queues and trees as well as sorting algorithms. Finally, the last day of the boot camp ended with a fun coding challenge that tested the new knowledge they learned.

```
Stack functions
class Stack:
    ...
    def top(self):
        """ Returns the top state of the stack if it's not empty
        if not self.is_empty():
            return self.items[-1]
        else:
            return "Stack is empty"

    def is_empty(self):
        """ Checks if the stack is empty and returns 'True' or 'False'
        return len(self.items) == 0

    def size(self):
        """ Returns the number of items in the stack
        return len(self.items)
```

```
Python Tutor Visualizes code in Python, JavaScript, C, C++, and Java
def partitionList(self, right):
    """ Returns a list of nodes, left and right
    left = []
    right = []
    while self.head:
        node = self.head
        if node.val <= right:
            left.append(node)
        else:
            right.append(node)
        node = node.next
    return left, right
```

### The different 'n' notations

O(1) - Constant time complexity  
O(n) - Linear time complexity  
O(n<sup>2</sup>) - Quadratic time complexity  
O(log n) - Logarithmic time complexity

Number of operations vs. Number of elements

22

Organised by Overflow

# Photography & Videography SIG



# RECENT ENGAGEMENTS

PVSIG has actively engaged in several significant events. One highlight was our participation in the WorldSkills ASEAN Event, where our EXCO members played pivotal roles. This event allowed students from diverse backgrounds to explore career interests and witness ongoing competitions. Moreover, it fostered collaboration not only within Ngee Ann Poly but also with other institutions.



Additionally, during June and July, PVSIG made a valuable contribution by producing a dozen interview videos featuring ICT One-Year Internship students. These students interned at organizations like AWS, OCBC, Govtech, NCS, and Workato. The videos offer insights into their experiences.

Supported by PVSIG



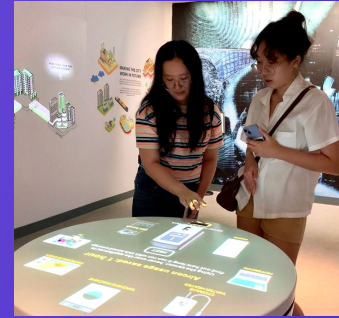
# THE DOT SIG



# Visit to Memories@58 Urban Sketchers Singapore x URA exhibition and URA Interactive Gallery

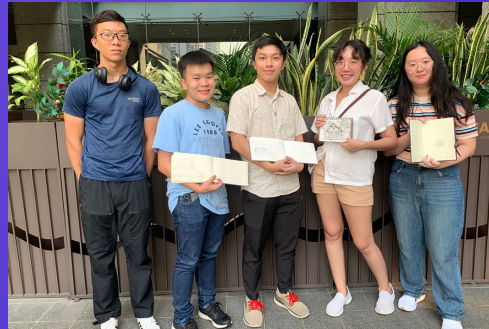
23th September 2023

The Dot SIG embarked on a captivating journey with Miss Anita as our guide to the "Memories@58 Urban Sketchers Singapore x URA exhibition." This unique experience immersed us in the diverse tapestry of Singapore's environments and architecture through a myriad of artworks. As we traversed the exhibition, the intricate and imaginative representations of Singapore's urban landscapes left us all inspired. Each piece conveyed a distinct story, and the passion of the artists was palpable.



In addition to our artistic endeavours, the Dot SIG's visit to URA Interactive Gallery also provided us with a fascinating educational experience. One such aspect was Singapore's water consumption, the exhibits provided valuable insights into how we can manage and optimize our water usage, serving as a poignant reminder of the need for sustainability and responsible resource management.

After touring the exhibition, the members walked around the URA building and settled on a location to sketch on-location. Good Composition was the topic of the day. Finally, everyone showcased their artwork to each other and received valuable feedback from Miss Anita.



# Gartic Phone Night

## Fortnightly



A light-hearted event hosted at the DOT SIG discord server for members to unwind and bond while participating in the Gartic Phone minigame. Hosted by the EXCOs every fortnight, lasting an hour, members describe and draw each other's wacky ideas in a short amount of time, testing all our creative minds.

Organised by The Dot





**Overseas Immersion**  
**Programme (OIP)**





# OIP - Hanoi, Vietnam

18th to 30th September 2023

On September 30, 2023, a few students and I had the privilege of visiting Hanoi, Vietnam, and to meet students from the National Economics University (NEU). Throughout the journey, I engaged in a variety of activities, including attending lectures at the NEU Campus which allowed me to deepen their understanding of Vietnam, visiting the Temple of Literature, and learning to prepare traditional Vietnamese cuisine. These experiences provided me with valuable insights into the history, economics, and culinary traditions of Vietnam.

During the leisure time, the NEU students generously introduced me to local delicacies such as Phở, Bánh Mì, Bún Chả, and more. Additionally, I got to explore various tourist attractions and cultural heritage sites in Hanoi, which further enriched my experience. Through these various experiences, I have gained a deeper understanding of Vietnamese customs and culture, while also establishing meaningful connections with students at NEU.

- Chia Eason CSF02

Through a two-week immersion programme from 18th to 30th September, the trip provided a unique experience for ICT students. Through the historical tours, lectures on Vietnamese economy and culture, hands-on experiences such as pottery and cooking class, they were exposed to a culture different from Singapore's. Hosted by NEU (National Economics University), they formed lasting bonds with NEU buddies. This trip to Hanoi was a transformative journey that deepened their cultural understanding, contributed in personal growth and offered insights into the history and economy of Vietnam.

- Marilyn Foong Ji Ean DS03



# OIP - Shenzhen, China

10 to 23 September 2023



In September, some of our ICT students embarked on a journey to Shenzhen, China, hosted by Shenzhen Polytechnic, where they got to indulge themselves in the experiences of Chinese culture. Over the 12 days, our students were exposed to a myriad of Chinese customs and traditions such as sewing, calligraphy and wushu. They also went on industry visits to Minieye and Tencent, where they learned about the various types of technologies used in modern development. Not only that, our ICT students also made long lasting friendships with some of the Shenzhen Polytechnic students, and made fond memories with them as they set out to explore the city together. Through this trip, the students were able to have meaningful and educational exchanges with the students in China, and learned to embrace the beautiful Chinese culture

- Kayen Giam, Year 2 IM01





# Hackathon

# HACKATHONS

*Experienced by Pranav Vijitharan, Year 2 DS*



2022 PolyFinTech 100 API Hackathon



Mapletree X NP Hackathon

Participating in hackathons has been a significant part of my journey through polytechnic. I find the process of tackling various problem statements and the ideation phase incredibly enjoyable. It all began with my very first hackathon, the 2022 PolyFinTech 100 API Hackathon. In this event, I teamed up with a group of classmates during my first year. We selected the Decentralised Exchange Problem Statement, even though I had no prior knowledge of it. Our group had to start from scratch, researching and learning everything about the topic in order to find a solution.

During the hackathon, we managed to make it to the category finals, but unfortunately, we didn't secure a win. Although it was disappointing, I refused to give up. I realized that these setbacks were merely stepping stones on my journey. Later, during a semester break, I joined another hackathon, the Mapletree X NP hackathon. In this competition, we achieved second place, earning a \$2000 cash prize. This initial victory provided me with the motivation to participate in many more hackathons in the future, some of which I won, and others where I faced defeat.

Losing in hackathons can be demoralizing, with sleepless nights and sacrifices feeling wasted. However, I soon came to understand that I had gained invaluable knowledge from these experiences that couldn't be acquired through academics alone. Furthermore, I had the opportunity to meet like-minded individuals and build important connections for my future. In the end, I learned that it's not just about the victories but the memorable journey taken during the process.

[Click here to read more about the Mapletree x NP Hackathon!](https://www.mapletree.com.sg/News%20and%20Publication/Press%20Releases/2023/April/Mapletree%20x%20NP%20Hack%202023.aspx)  
<https://www.mapletree.com.sg/News%20and%20Publication/Press%20Releases/2023/April/Mapletree%20x%20NP%20Hack%202023.aspx>

# OTHER HACKATHONS

Experienced by Pranav Vijitharan, Year 2 DS



DSTA Hackathon



HacX for Public Safety by  
Microsoft and HTX



SUTD What the Hack



MindfulHacks 2023

The background features a solid purple color with four abstract, wavy, metallic-looking shapes in shades of blue, cyan, and magenta. These shapes are positioned in the corners: top-left, top-right, bottom-left, and bottom-right. The word "Scholarship" is centered in the middle of the page.

# Scholarship

# In the area of science and technology, there is the DSTA Scholarship.

The DSTA Scholarship provides diverse opportunities to grow and excel in exciting domains of engineering, digital transformation and cybersecurity. Transform your passion into high-impact innovation that strengthens Singapore's defence capabilities!

**Apply Now!**



BROUGHT TO YOU BY :



Danette Oh



Dhavasre