ICT TIMES

14th Edition

June - December 2024

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ICT SOCIETY

STUDENT BODY OF
SCHOOL OF INFOCOMM TECHNNOLOGY

CommServe - APSN Tanglin

22, 28 August 2024

NP ICT had the incredible opportunity to visit APSN Tanglin Special School, where we raised awareness about cyber relationships, online identity, and staying safe online.

As ICT students, we were thrilled to contribute meaningfully by **educating students on cyber wellness.** Through insightful presentations, interactive skits, and engaging hands-on activities, we made learning about **digital safety** both fun and impactful.

This experience was truly enriching as we helped students understand the importance of **responsible online behavior** and how to **navigate the digital world safely.**

ICT SOCIETY ANNUAL GENERAL MEETING

6 November 2024

Our first Annual General Meeting (AGM) was a fantastic start to the year! It was an incredible opportunity to connect with our members, **introduce the EXCO team**, and **unveil exciting plans** for the months ahead.

During the session, attendees got a **sneak peek** at upcoming events, volunteer opportunities, and ways to get involved.

WALK FOR RICE

8 November 2024

The Walk for Rice 2024 event was a meaningful and impactful experience, bringing together ICT students to walk for a cause. For **every 300m** walked, FairPrice Foundation **donated 1 bowl of white rice**, **1 bowl of brown rice,** and **1 bowl of oats** to **underprivileged families** in the **South East District.**

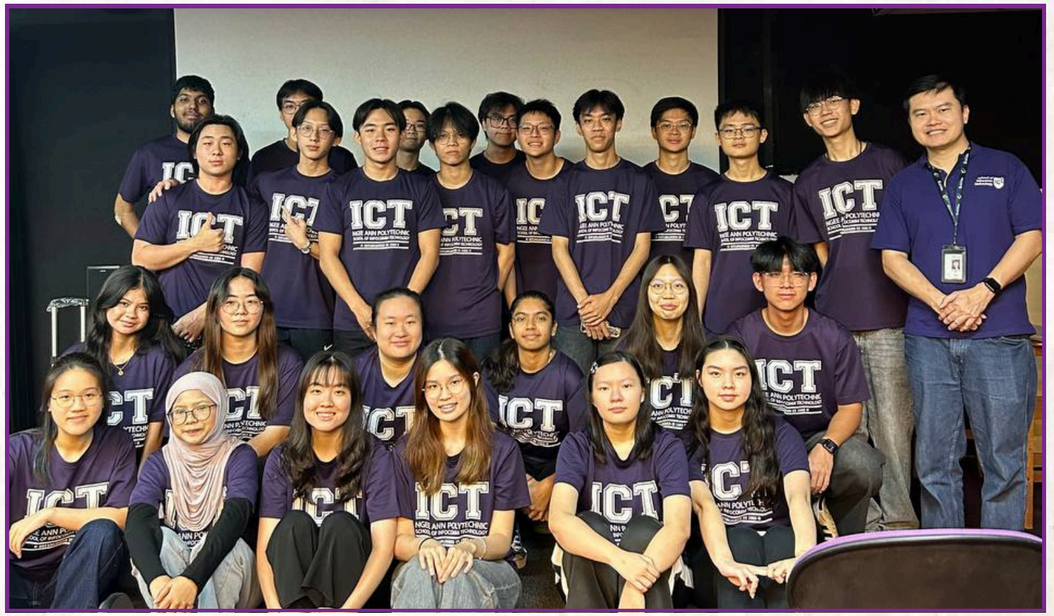
By representing the School of ICT, our students played a vital role in supporting the community while promoting an active lifestyle.

RED CAMP

14 November 2024

NP's annual Red Camp brought together enthusiastic **O-Level and ITE students** for an exciting day of exploration into the world of ICT! With the help of our dedicated ICT Ambassadors, attendees got an exclusive **glimpse into the cutting-edge courses, hands-on projects**, and **vibrant student life** that NP has to offer.

From interactive workshops to engaging student sharings, our **ambassadors** played a **key role** in **welcoming, guiding, and inspiring** potential ICT students. They shared personal experiences, showcased innovative projects, and provided valuable insights into the skills and opportunities within the ICT field.



SPECIAL INTEREST GROUPS (SIGS)

OVERFLOW

“INSPIRING TECH TALENT EVERYDAY”

PROJECT PIXEL PERFECT

31 August 2024

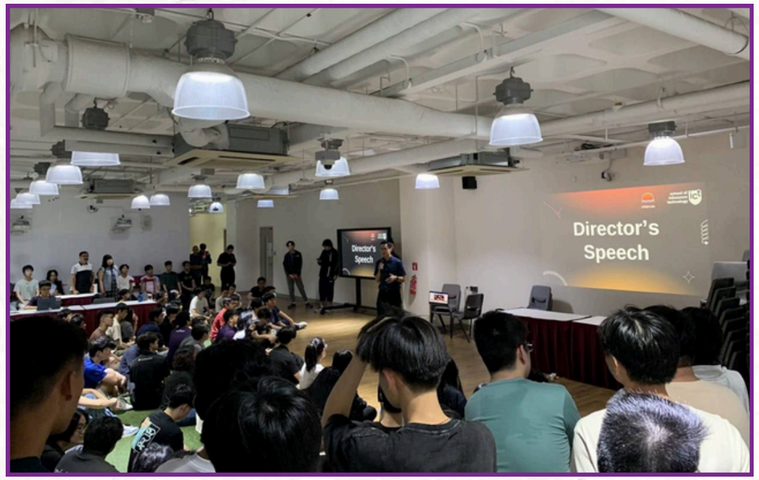
A collaborative initiative by NP Overflow and NP Leo Club, Project Pixel Perfect, aimed to **empower seniors with digital design skills.** It was held at Potong Pasir CC during the semester break, the workshop introduced participants to Canva**,** where they learned to **create personalized photo collages**. Beyond mastering basic design tools, **seniors** explored the potential of **generative AI** to enhance their creativity.

With the support of **Potong Pasir CC** and **dedicated volunteers**, this initiative **bridged the digital divide**, fostering **confidence**, **creativity**, and **intergenerational learning**.

This project not only helped seniors **navigate modern technology** but also **strengthened community bonds** through shared experiences.

BYTEHACKZ

13-15 November 2024



ByteHackz is NP ICT's flagship annual hackathon, running for **7+ years** and integrated into the Year 2 IT curriculum. It challenges students to solve real-world problems while honing technical and problem-solving skills.

Organised in **collaboration with industry partners** like OCBC and Alibaba, students receive mentorship and feedback, refining their solutions to industry standards.

ByteHackz fosters innovation, creativity, and hands-on learning, bridging the gap between academia and industry, and **preparing students** for **future tech careers**.

OVERFLOW'S TECH WORKSHOPS

Weekly / Bi-Weekly Basis

For over 13 years, NP Overflow has been conducting weekly and biweekly workshops, equipping Ngee Ann Polytechnic students with **essential skills in programming, artificial intelligence**, and **robotics**. These workshops serve as a platform for students to **explore new technologies**, **develop hands-on expertise**, and **collaborate with like-minded peers**.

Each year, the workshop lineup is carefully curated to cover a **diverse range of topics**, ensuring that students **stay up to date** with **industry trends** and **emerging technologies.**

The final Overflow Workshop of AY24/25
Workshop 10 – Swift and SwiftUI (iOS App Development)

The **2024 workshop series** includes:

- **Workshop 01** – Intro to Web Development (with Nullsec)
- **Workshop 02** – UI/UX with Figma
- **Workshop 03** – Git and GitHub
- **Workshop 04** – Discord Bot Development
- **Workshop 05** – Local LLM (with AISIG)
- **Workshop 06** – Backend Development with Flask
- **Workshop 07** – Unity I (Game Development)
- **Workshop 08** – Unity II (Advanced Game Development)
- **Workshop 09** – Three.js (Web 3D Graphics)
- **Workshop 10** – Swift and SwiftUI (iOS App Development)

By fostering a **culture of learning and innovation**, these workshops provide students with **valuable hands-on experience, mentorship**, and **opportunities to build real-world projects**—helping them **gain a competitive edge** in the tech industry.

Workshop 05 – Local LLM (w/ AISIG)

Workshop 09 - Three.js (Web 3D Graphics)

AMPHIBI STUDIO

“TOGETHER WE BUILD DREAMS”

AMPHIBI INDUCTION SESSION

14 October 2024

Amphibi hosted its first-ever induction session, a lively and engaging event designed to **welcome new members into the community**. The session provided an insightful introduction to Amphibi's mission, upcoming projects, and the various ways members could get involved. Attendees gained a deeper understanding of the **group's goals** and how they could **contribute meaningfully**.

To foster connections, interactive icebreaker activities created a relaxed and friendly atmosphere, allowing members to **socialize and form new friendships**.

By the end of the session, new members were i**nspired and eager for the journey ahead**.

AMPHIBI GAME NIGHT

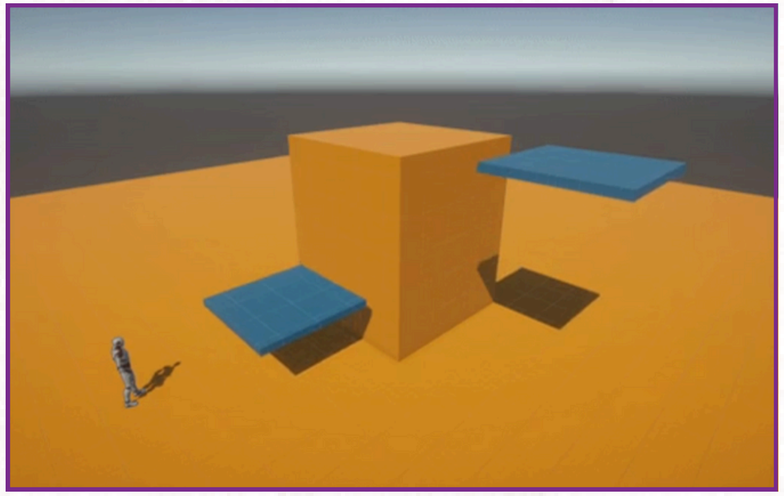
28 October 2024

The first **Game Night** allowed the members to have a **memorable** evening of excitement, energy, and friendly competition. There were a plethora of game choices ranging from immersive **VR games** to the **classic board games.** They all had a buzz of anticipation the moment the place, eyeing all the wonderful games there. You could hear laughter as they were playing, trying to come up with strategies to win!

Ice breakers were held to forge bonds and make strangers become teammates and rivals become friends. By the time evening had hit, the room was filled with smiles, shared victories, and new friends.

AMPHIBI PROBUILDER WORKSHOP

26 November 2024

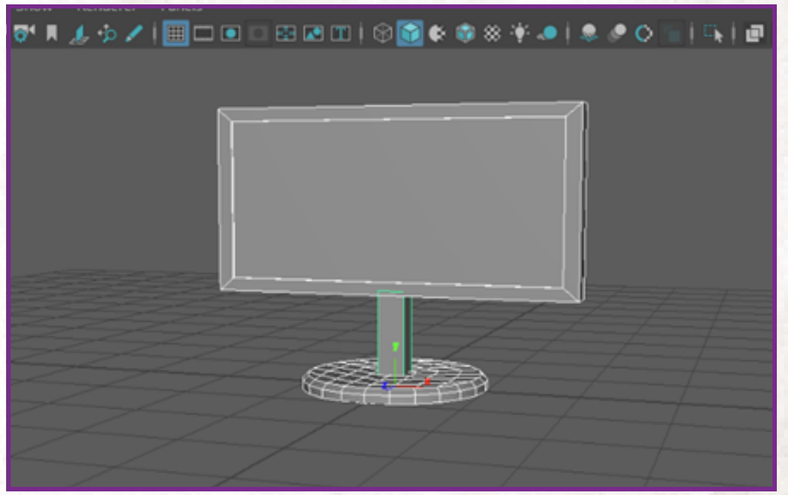


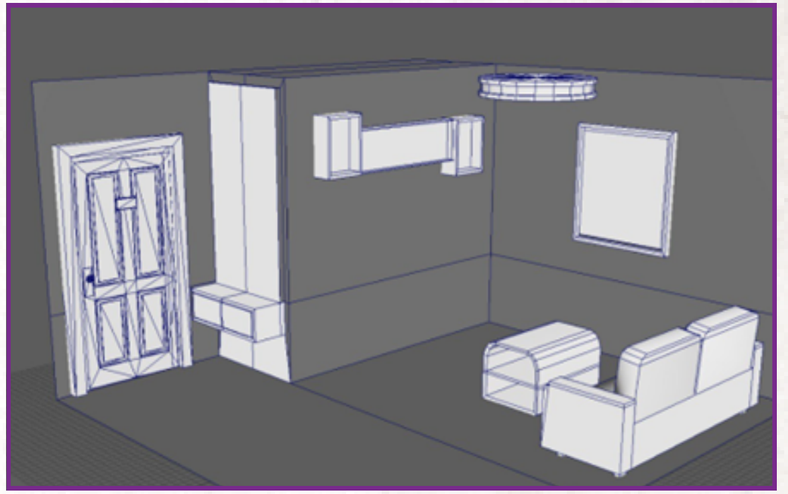
Amphibi Studios held its first-ever workshop, an exciting hands-on session focused on **Unity's ProBuilder**. Participants explored the **fundamentals of 3D level design**, learning to create and customize environments directly within Unity. The main objective was to build a basic obstacle course, incorporating scripted mobile elements to **enhance gameplay and interactivity**.

Whether beginners or experienced developers, all attendees walked away with **valuable new skills and a deeper understanding of environment design**. Beyond the technical learning, the workshop fostered creativity, problem-solving and collaboration.

AMPHIBI AUTODESK MAYA WORKSHOP

02 December 2024





Amphibi Studios' 3D Modeling Workshop, exposed learners to Autodesk Maya, a versatile software used in **game development, animation, and visual effects**. Learners learned the **fundamentals of 3D modeling** and **hands-on skills** on how to work with the Maya interface and core tools.

The session's climax was an interactive exercise where the attendees **created a computer monitor**, and later, fun exercises to **create everyday objects** like **doors and sofas**. Both beginners and aspiring 3D artists were able to let their imagination run wild and learn new skills.

Beyond the technical aspects, the workshop also **promoted teamwork and problem-solving.**

ORION

“PLAN AS ONE, EXECUTE AS ONE”

KEBAN BAHRU FAMILY DAY

07 July 2024

ORION was honored to present to large public audiences and multiple news agencies at this prestigious community event. During the event, ORION was able to **gain valuable insights** from Senior Minister **Mr. Lee Hsien Loong**, MP **Mr. Henry Kwek** and **Mr. Laurence Liew**, Director of AI Singapore, having the privilege to discuss about the **exciting advancements of AI in Singapore** and showcase industry projects and student work, **demonstrating ICT talent and innovation.**

It was a very memorable events for the residents as there were diverse sports try-outs, interactive art booths and interest group activities. Additionally, the new AI Interest Group, **Good Robot**, aimed at promoting AI knowledge, will be working on collaborations with partners like **AI Singapore** and **Ngee Ann Polytechnic** to **introduce outreach and engagement programmes** in the community.

MOE VISITS NPICT

12 July 2024

ORION had the honor of **welcoming Minister Mr. Chan Chun Sing, Minister Dr. Maliki Osman**, and the **MOE Delegation**. **ORION** showcased the **Gen AI Hub,** where students' **Capstone Projects** and **AI-driven innovations** were **on display.**

A **key highlight** was the **National Dental Centre Industry Project,** a **collaboration** between **ICT and LSCT** students, featuring an **AI-driven denture designer** that reduces workload and production time. This event was a proud moment to showcase the talent and creativity of our students to esteemed guests.

ICTXPLORE

05-06 September 2024

ICTXplore was an event to **allow secondary school students** to explore the **four exciting diplomas NPICT** has to offer.

Students engaged in **hands-on activities** like SQL, Python Programming, 3D Modelling, Generative AI, and Cryptography.

The **Murder Mystery-themed event** kept the energy high and had the honour of having **Dr. Francis Goh**, a highly respected industry leader and author, ex employee of AWS and SAP, share his **invaluable insights about the tech industry**, inspiring the next generation.

To end off, there was prize ceremony, sponsored by **GainCity Singapore and TWM Distribution**.

RED CAMP

14 November 2024

ORION played a key role in RED Camp for recruitment and training of all ICT emcees, ensuring a **smooth and engaging experiences** for participants.

The **emcees** were tasked with **keeping the energy high** whilst explain the **exciting culture of NPICT**.

From the **four unique diplomas NPICT offer** to the student life here in NPICT, the emcees provided the participants **valuable experience and insights** about what it would be like here in NPICT.

AISIG

“LEARN, CREATE, COMPLETE”

MOE VISITS NPICT

12 July 2024

Mr Chan Chun Sing and **Dr Maliki Osman** visited the Gen AI Hub, where they were introduced to students' **Capstone Projects** and other **innovative Generative AI solutions**.

A key highlight was the National Dental Centre Industry Project, where ICT and LSCT students collaborated to develop an **AI-driven denture designer**, significantly **reducing both time and workload** in dental prosthetics.

LLM WORKSHOP WITH OVERFLOW

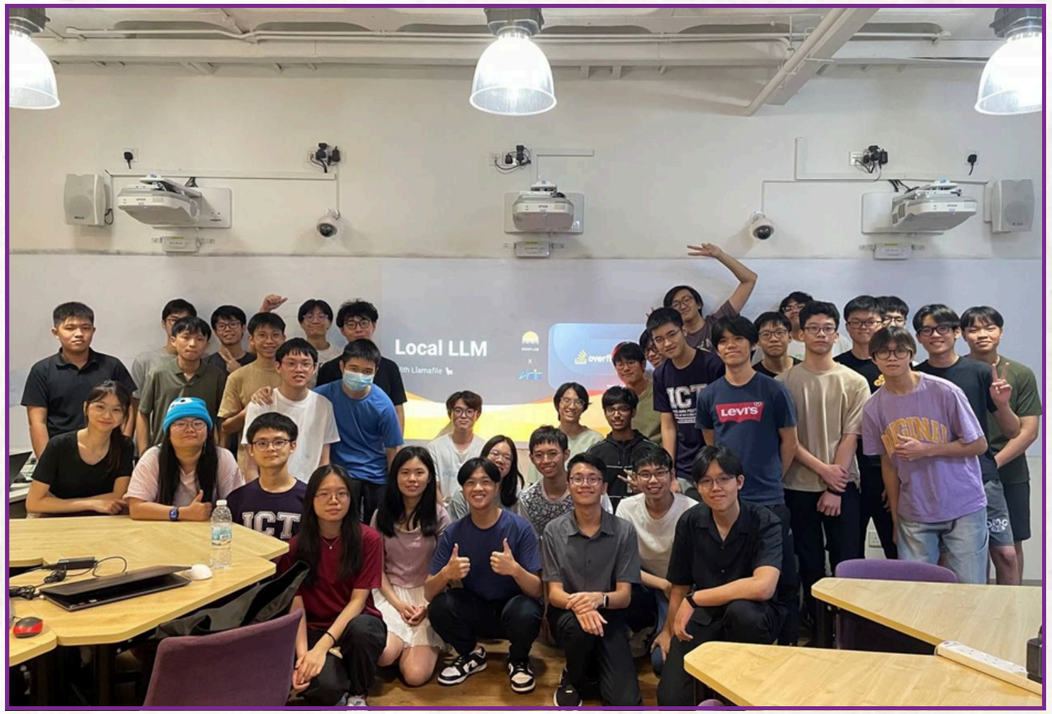
26 July 2024

Overflow and AISIG co-hosted a workshop on **large language models** (LLMs), guiding participants in developing **customized LLMs.**

Attendees explored the benefits of **running LlamaFile locally for privacy**, **data ownership**, and **customization**. They also learned prompt engineering techniques, including zero-shot and few-shot prompting, to enhance model accuracy.

A hands-on session let them build a chatbot using OpenAI and Tkinter, **gaining practical experience in UI setup** and **user interactions**.

The workshop was an insightful experience, equipping participants with **key LLM development skills** and **fostering collaboration** between both SIGs.



SCS

SINGAPORE COMPUTER SOCIETY

SCS X NEWHOPE COMPUTER VOLUNTEERING

07 July & 04 September 2024

The **NP SCS SIG** collaborated with **SCS Youth** and **New Hope Community Services**, organised its first event at Transit Point @ Margaret Drive to **equip individuals facing housing insecurity with basic computer skills**.

Participants learned to **navigate computers** and use **Microsoft tools** like Excel and Word, helping **improve their employability and self-sufficiency**.

Beyond skill-building, the event created a meaningful space for **socializing and networking**.

Participants engaged with a diverse group of individuals, including working adults and fellow youths, all united by a **shared goal of giving back to the community**.

This interaction **fostered encouragement** and **motivation**, reinforcing the idea that everyone deserves a **second chance to rebuild their lives**.

NAVIGATING YOUR TECH CAREER

27 November 2024

The IT Mentorship Event, **Navigating Your Tech Career**: Insights & Internship Prep, organized by **SCS SIG** in **collaboration** with **SCS Youth**, provided students from the Information Technology course with **valuable insights as they prepared to begin their internships**.

The event featured three mentors from different IT fields, including Software Engineering, Cloud Computing, AI, and Enterprise Computing.

Students learned about the **daily responsibilities and company culture** in various IT roles, received tips on overcoming **common career challenges**, and discussed **important skills** for standing out in the industry.

The mentors also shared advice on staying current with upcoming trends and **addressed misconceptions about the tech industry**, helping students gain a **clearer perspective** as they entered the workforce.

NULLSEC

“FOR A SECURE FUTURE”

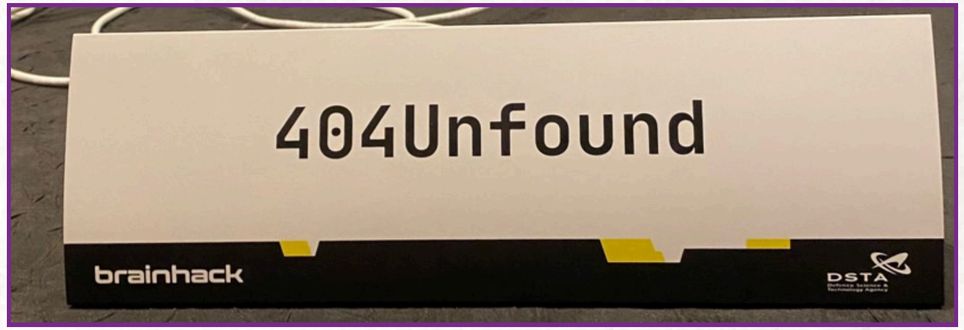
BRAINHACK – CDDC

01 May - 13 June 2024

DSTA's BrainHack 2024 was an exciting digital tech event that drew participation from over **4,000 students across 109 schools.**

As part of BrainHack's Cyber Defenders Discovery Camp (CDDC) programme, four NullSec members competed a CTF competition as `404Unfound`, where they put their cybersecurity skills to the test. After qualifying for the finals, the team , secured an impressive **3rd place** after **tackling various challenges** in categories like Blockchain and Reverse Engineering.

The competition provided a v**aluable learning experience**, pushing participants beyond their comfort zones. A huge congratulations to the team for their outstanding performance!



Featured in the photo (from left to right) are Wayne Chia, Kairos Tay, Hu Bowen, and Galen Tay

YOUTH CYBER EXPLORATION PROGRAMME

18-20 June 2024

NullSec hosted the annual **Youth Cyber Exploration Programme** (YCEP), a three-day cybersecurity bootcamp supported by the **Cyber Security Agency** (CSA).

The camp was designed to **pique secondary and JC students' interest in cybersecurity** by introducing them to **key cybersecurity concepts** such as cryptography, reverse engineering, OSINT, forensics, and web exploitation through lectures, as well as a Capture-the-Flag (CTF) competition.

Students improved their **technical skills** and **problem-solving ability** by participating in engaging workshops and **hands-on activities**. The workshop concluded with a **mini CTF competition** in which participants applied their **newly acquired knowledge** in an exciting test of ability and teamwork.

INTRODUCTION TO KALI LINUX

04 July 2024

NullSec conducted the `Introduction to Kali` workshop to introduce students to Linux and Kali Linux, a security-focused operating system used for **penetration testing** and **cybersecurity research**.

The session **covered essential Linux concepts**, including CLI vs. GUI navigation, fundamental commands, and file management.

Participants gained hands-on experience with key Kali Linux tools like Nmap, Wireshark, Burp Suite, and Netcat, learning their applications in cybersecurity. The workshop concluded with a Capture-the-Flag (CTF) challenge, allowing attendees to apply their newly acquired knowledge in real-world scenarios.

INTRODUCTION TO CRYPTOGRAPHY

07 November 2024

NullSec conducted Introduction to Cryptography, a hands-on workshop designed to introduce students to fundamental **cryptographic concepts**.

Participants explored **classical ciphers** such as the Caesar, Affine, and Vigenère ciphers, before diving into advanced encryption methods like RSA. The session included interactive explanations, live demonstrations, and engaging discussions on **cryptographic applications in cybersecurity**.

To reinforce learning, students completed mini challenges, including **decrypting encoded messages and reversing RSA encryption**. This workshop helped the students develop a deeper appreciation of cryptography's role in securing digital communications.

RED CAMP

14 November 2024

NullSec played a part in Red Camp, **introducing secondary school students to the Diploma in Cybersecurity & Digital Forensics (CSF)**.

They conducted a **hands-on workshop** on Web Application Hacking, demonstrating how vulnerabilities can be exploited with a using a fictional "NPbank" lab.

RED Campers learned how a **simple SQL payload** could grant unauthorised access—making them "millionaires" in the simulation!

The interactive session **sparked interest in cybersecurity**, giving students a glimpse into the field.

THE DOT SIG

ART & DESIGN

SOCIAL & SKETCH

4 November 2024

Social & Sketch was an interactive session for members to **foster both creativity and connection**.

The event featured three activities: Telephone with Drawing, Reverse Pictionary, and Persona Collage.

Telephone with Drawing tested participants' ability to interpret and recreate drawings, Reverse Pictionary involved verbal descriptions of images, and Persona Collage allowed members to express their identities through doodles and symbols.

The event **fostered new friendships** and set the stage for an exciting year at DotSIG, as everyone had an amazing time!

GIRLS-IN-TECH

“EMPOWERING GIRLS, BRIDING THE GENDER GAP”

GIT X IZENO X LOGICALIS TECH-TASTIC SERIES

20 December 2024

The GiT x iZeno x Logicalis Series 3: Code Craze provided an insightful dive into **microservices architecture** as part of the Tech-Tastic 3 Series. The session covered **monolithic vs. microservices architectures, Service-Oriented Architecture (SOA), and real-world applications**, with complex topics broken down into digestible insights.

Through hands-on activities, we **designed microservice systems**, exploring API gateways, service discovery, and inter-service communication. The **HR, Data, and Sales teams** shared how microservices enhance workflows, **offering valuable industry insights.**

A key highlight was our **iZeno office visit**, where we experienced their work culture, development processes, and tech innovation firsthand. The event combined learning, creativity, and networking, further fueling our passion for tech!

PVSIG

PHOTOGRAPHY & VIDEOGRAPHY

HALLOWEEN WITH ERUDITES

28 October 2024

During Halloween 2024, PVSIG partnered with NP Erudites to bring the spooky season to life by **capturing the thrilling moments** of the celebration. From the eerie atmosphere of the haunted house to the lively costumes and interactive activities, our team worked behind the lens to **preserve the excitement of the event**.

This collaboration allowed us to not only document the festive spirit but also **showcase the creativity and dedication of the NP community**. It was an unforgettable experience where our members refined their skills in event photography and videography while contributing to the vibrant student life at NP.

Participants looking very enthusaistic as they embark on the game

WALK FOR RICE

6 November 2024

In partnership with **NTUC**, our school's annual Walk for Rice event brought the community together to support a meaningful cause. The PVSIG team was honoured to capture the key moments of this heart-warming initiative, where participants walked to **raise rice donations for underprivileged families.**

One of the most inspiring aspects of the event was the participation of **visually impaired individuals**, showing that the spirit of giving knows no boundaries. Documenting these powerful moments reminded us of the importance of inclusivity and community support.

We are proud to have played a part in preserving the heartfelt stories and unwavering determination displayed during the event.

Walk for Rice Volunteers with Mr Kah Yong, from Dialogue in the Dark

OVERSEAS IMMERSION PROGRAMME (OIP)

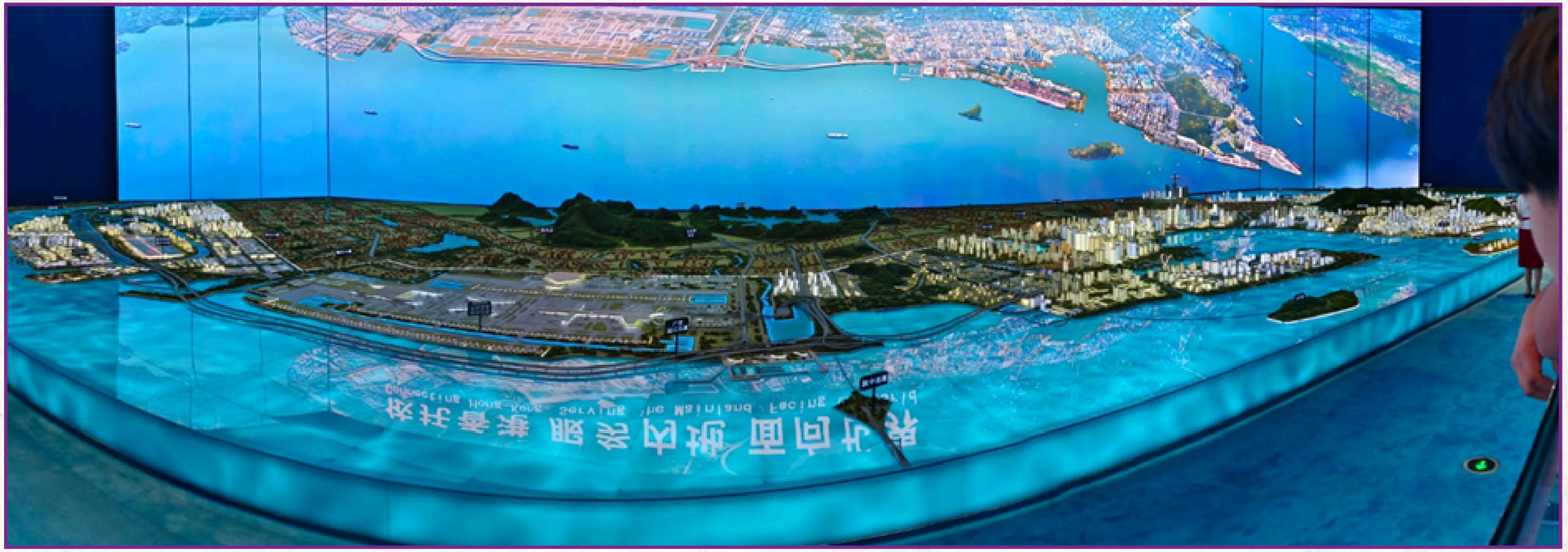
ICT OIP - SHENZHEN

14-24 September 2024

A group of ICT students embarked on an eye-opening and transformative Overseas Immersion Programme (OIP) to Shenzhen, hosted by **Shenzhen Polytechnic University (SZPU)**. Recognized as China's Silicon Valley, Shenzhen is a global hub for technology, innovation, and entrepreneurship, making it the perfect destination for aspiring ICT professionals to gain firsthand exposure to **cutting-edge advancements**.

Throughout the trip, students had the opportunity to engage with **leading tech companies**, witness **groundbreaking innovations**, and experience the **fast-paced technological ecosystem** that has propelled Shenzhen to the forefront of global digital transformation.

Champions of Mini Frisbee Competition held on Day 1 of OIP SZ!



Throughout the trip, we visited leading tech companies such as **Hans Laser** and **UB Technologies**, gaining insights into **cutting-edge manufacturing**, **robotics**, and **automation**. The tours highlighted how China is at the forefront of global innovation, integrating advanced AI, smart infrastructure, and engineering breakthroughs to shape the future of technology.

One particularly fascinating visit was to a development hub that showcased Shenzhen's plans to **enhance connectivity with neighbouring regions** like Hong Kong through **underground tunnels** and **high-tech infrastructure**. Seeing these large-scale projects firsthand emphasized the city's role as a global technology powerhouse.

Amidst our busy itinerary, visiting a Cat Café in Shenzhen was a fun and relaxing break from the fast-paced city. The cozy café was filled with playful and curious cats, creating a warm and inviting atmosphere.

At first, the cats kept their distance, but with treats in hand, they quickly became **affectionate companions**. It was heartwarming to cuddle and play with them while enjoying a warm drink.

As our trip ended, we left Shenzhen with **lasting memories,** new friendships, and valuable knowledge. More than just a study trip, it was a step toward becoming **globally aware tech professionals** ready for the future.

Shared by Osmond Lim, Y1 IT01

Osmond with three adorable cats — they were only there for the food!🐱

ICT OIP - HANOI

08-14 September 2024

A group of ICT students embarked on an unforgettable journey to Hanoi, Vietnam as part of the Overseas Immersion Program (OIP). This trip provided a **unique opportunity** to experience Vietnam's rapidly growing business landscape, **thriving technology sector**, and deep-rooted cultural heritage.

Throughout the trip, students **engaged in insightful discussions**, **hands-on learning experiences**, and **industry visits** that expanded their understanding of Vietnam's innovation ecosystem and entrepreneurial spirit.

Pre-Flight Picture @ Terminal 2 Singapore Changi Airport

Upon arrival, we were warmly welcomed by students from **National Economics University (NEU)** with an energetic cultural performance and a heartfelt speech. Their hospitality made us feel at home and was a fantastic way to start our journey in Hanoi. It was inspiring to see their passion as they proudly introduced us to their **culture, traditions, and student life.**

During our trip, we visited **Hoa Lo Prison,** which was originally used by French colonists for political prisoners and later by North Vietnam for U.S. prisoners of war. I also had the incredible opportunity to experience **Vietnamese street food** for the first time, with Pho being a highlight—an unforgettable gastronomic adventure!

Shared by Janelle Ng, Y1 IM03

First Meal of the OIP Trip! Good Food with Good Company!

We visited **Kafela**, a social enterprise that works with local farmers to bring Vietnamese coffee to the global market. It was inspiring to see how they **promote sustainable farming** and fair trade while developing unique coffee products that highlight Vietnam’s rich coffee culture.

At the **National Innovation Centre**, we saw how Vietnamese startups are supported through mentorship and funding to develop cutting-edge solutions. Seeing young entrepreneurs bring their ideas to life showcased Vietnam’s growing tech and business landscape.

The trip ended with a Vietnamese cooking class, where we learned to make Pho and Spring Rolls. This hands-on experience gave us a **deeper appreciation for Vietnamese cuisine**, emphasizing fresh ingredients and traditional cooking techniques.

SPECIAL MENTION

MY FIRST AID EXPERIENCE IN ACTION

28 February 2025

On my way home after completing my first aid course, I witnessed an accident on the bus. The driver made a sudden stop, causing a middle-aged man to fall and hit his head. Although I couldn't see everything clearly from the back of the bus, I knew it was serious when the driver told everyone to get off. I hesitated at first, unsure if I was ready to handle a real emergency, but then I decided to go back and told the driver I was first aid certified.

When I reentered the bus, I was shocked to see blood everywhere. Luckily, another passenger was also trained in first aid. I had a triangular bandage and gauze roll on me, so together we worked to apply pressure to stop the bleeding. After we stabilized him, I kept the man conscious by asking simple questions, like where he was and what bus he was on. The ambulance arrived within minutes, and the other first aider briefed them on the situation.

Looking back, the experience was overwhelming, as it was my first time dealing with such a situation, and it felt very different from what we learned in training. However, I'm glad I kept my composure and applied what I learned.

The course really prepared me for this type of emergency, and I feel grateful for the chance to help. I would definitely recommend first aid training to others.

S Bhavesh Narayanan
Year 1 Information Technology

ACKNOWLEDGEMENTS

ACKNOWLEDGEMENTS

ICT Society – Praise Hoo
Overflow – Jeffrey Lee
Amphibi Studio – Alfred Kang
Orion – Dylan Loh
AISIG – Tan Hong Kai
Nullsec – Dhavasre Senthilkumar

Girls In Tech – Ngui Jia Xuan
The Dot – Karlyn Wee
PVSIG – Ravikumar Praveena
SCS – Ian Lim
OIP Shenzhen - Osmond Lim
OIP Hanoi - Janelle Ng
Special Mention - Bhavesh Narayanan

14TH ICT TIMES TEAM

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