

# DSCOURSE

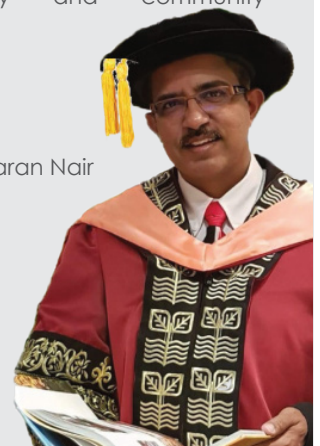
Weekly Vol. 8. Issue 04



## Remarks from the President

Student projects like the IoT Penang Flood Alert System epitomise the immense value of practical learning experiences for students and the community. By tackling real-world issues, students like Chow Wey Shern, Lim Hao Zhi, and Ng Shi Hui are not only applying their theoretical knowledge but also developing critical skills in problem-solving, innovation, and technology application. These projects foster a sense of responsibility and engagement with community welfare, preparing students not just for their careers but to be future leaders and changemakers. Their potential is a source of hope and optimism for the future.

For the community, such initiatives translate into tangible benefits—this particular system offers a proactive approach to flood management, a critical need in flood-prone areas like Penang. By providing real-time data and essential emergency resources, the system enhances community resilience against natural disasters. Integrating a donation platform within the app also encourages community solidarity, ensuring support reaches those most in need during crises. Thus, these projects significantly contribute to societal advancement by bridging technology and community service.



Prof. Dr.  
Vikneswaran Nair  
President

## Empowering Communities with Real-Time Flood Monitoring

The IoT Penang Flood Alert System, developed by DISTED's IT and Computer Science students, uses IoT technology for real-time flood monitoring and community support in Penang.

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## Cover Story

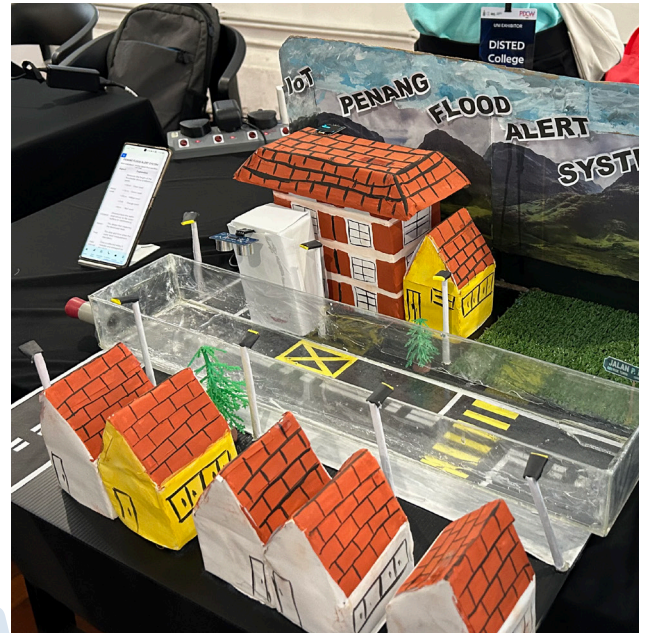
# IoT Penang Flood Alert System: Empowering Communities with Real-Time Flood Monitoring

Two Diploma in Information Technology students, Chow Wey Shern and Lim Hao Zhi, along with Diploma in Computer Science student Ng Shi Hui of DISTED College, have developed an innovative project titled the IoT Penang Flood Alert System. This final year project, showcased during the Penang Digital Creative Week (PDCW) organised by Digital Penang on July 20 and 21, 2024, leverages Internet of Things (IoT) technology to revolutionise flood monitoring and community support in Penang.

At the heart of this innovative system is an ultrasonic sensor that detects water levels during floods. This sensor captures precise measurements of the water level, which are then transferred to a mobile application. The application displays the average water level status every five minutes on an easily interpretable chart, ensuring users are constantly informed about current flood conditions. This real-time data visualisation facilitates prompt and informed decision-making, crucial during flood emergencies.

The mobile application goes beyond mere data display by offering additional features that enhance its utility. Users can view the locations of evacuation centers in various areas of Penang, providing them with essential information on where to seek refuge during floods. An emergency contact table within the app lists crucial contact numbers for different emergency services, streamlining communication and response during crises.

One of the standout aspects of the IoT Penang Flood Alert



System is its integrated donation platform. Recognising the importance of community support during disasters, this platform allows users to contribute in two significant ways: by donating funds or essential items. This dual donation mechanism ensures that both immediate financial assistance and necessary supplies reach those in need, fostering a robust community response and

resilience during flood events.

The IoT Penang Flood Alert System project not only highlights the technical acumen and innovative spirit of its creators but also underscores the practical applications of IoT technology in disaster management. Showcasing their project at the PDCW provided the students with invaluable exposure and opportunities to connect with industry professionals, further cementing their role as future leaders in technology-driven solutions for community challenges.

Seethai Subramaniam  
 Head, School of Computing  
 and Engineering



## Harnessing the Power of Natural Language Processing in Modern Data Analytics

In recent years, natural language processing (NLP) has revolutionised data analytics, enabling computers to analyse, modify, and understand human language from vast amounts of text and speech data. Technologies like sentiment analysis, chatbots, and speech recognition automate tasks and provide competitive advantages across industries. Tools like SpaCy, a Python library, exemplify advancements in NLP, offering robust text processing capabilities and deep learning support. DISTED College integrates these technologies into its curriculum, equipping graduates for success in the dynamic tech sector. By embracing NLP and other cutting-edge tools, DISTED prepares students to navigate and innovate within today's rapidly evolving technological landscape.

Nurul Annisa binti Azhar  
Lecturer, School of Computing and Engineering



## NUMed and DISTED Forge Pathways for Medical Studies

Recently, Prof. Vishna Devi and Prof. Dr. Harinarayan Radhakrishna from Newcastle University Medicine Malaysia (NUMed) visited DISTED College to discuss recognising DISTED's Foundation in Science as a valid entry requirement for NUMed's Medicine and Biomedical Sciences degree programmes. This collaboration aims to streamline academic pathways, allowing students a smoother transition from DISTED to advanced medical studies at NUMed. The initiative reflects both institutions' commitment to educational excellence and enhanced opportunities for students pursuing healthcare careers.

Geong Chooi Peng  
Head, School of Pre-University Studies



## Hands-On Entrepreneurship Venture

On 8 and 9 June, my teammates Leong Qi Hui, Tan Jou Xi, Kor Hui Hui, Ooi Wan Tian, and I launched our business venture, Sparkle & Sweet, for our entrepreneurship course project in the Diploma in Business Studies programme. We set up our stall at Sia Boey Archaeological Park in Penang, offering sparkling drinks and desserts like puddings and traditional popsicles to refresh visitors. Buoyed by our initial success, we expanded to the Nibong Tebal Carnival from 14 to 17 June, adding oden to our menu to attract a broader audience amid intense competition. These experiences tested our teamwork and problem-solving skills as we managed inventory, responded to customer feedback, and maintained quality service. We learned invaluable lessons about market demand, customer preferences, and the need for adaptability. These insights have not only enhanced our confidence but also equipped us with practical knowledge for future entrepreneurial pursuits, providing a solid foundation for our growth as budding entrepreneurs.

Tan Jou Xi  
Student of Diploma in Business Studies students



## DISTED College Hosts Study UK Pre-Departure Briefing

On July 19, 2024, DISTED College, in collaboration with the British Council, hosted the "Study UK Pre-Departure Briefing" at its campus in Penang. The event drew a large crowd of eager students from DISTED and other institutions looking to further their education in the United Kingdom. The briefing provided a unique opportunity for direct interaction with a UK Visa & Immigration representative, offering students critical insights into visa application processes and timelines. Additionally, attendees learned about the IELTS test, which is crucial for non-native English speakers applying to UK universities. Prof. Dr. Vikneswaran Nair, President of DISTED College, opened the session by highlighting the academic prestige of UK universities and the robust support systems in place for international students. His encouraging words motivated students to utilise the resources provided, seek advice, and pursue their educational dreams in the UK.





DISTED College hosted the CRIT ACS Season 3 PUBG Mobile Competition on June 25, 2024, as part of the ACS EDU Tour—a prominent esports initiative by CRIT Esports. With a significant prize pool of RM200,000, the tournament drew over 6,400 participants from 100 universities across Malaysia. The event took place in

DISTED's cafeteria from 12:00 PM to 6:00 PM, featuring eight teams from various institutions. The competition saw Team "MRE HUNTSMEN" clinch the championship, while "RH XPROJECT" and "DxG Expert" secured the 1st and 2nd runner-up positions, respectively. Main sponsors included Unifi Mobile, ZTE, Safi Shayla, MESF, ESI, and Tencent's PUBG MOBILE. The event showcased not only the competitors' esports prowess but also their academic dedication, marking a successful regional qualifier for Malaysia's collegiate esports scene.



Ooi Jing Wen aka "SolemnBanana", E-Sports Club Vice Secretary

Edited by: Yee Tianle aka "Comic", E-Sports Club Advisor



Please scan to read



the  
**FULL**  
article

#### Our team:

Editor: Prof. Dr. Vikneswaran Nair; Assistant Editor: Dr. Lum Li Sean; Lead Contributors: Seethai Subramaniam (Computing & Engineering); Geong Chooi Peng (Pre-University Studies); Dr. Lum Li Sean (Business & Accounting); Kaitlyn Khoo Rui Ern & Tan Jia Huey (Student Affairs News); Design & Layout: Tay Hooi Khoon; Distribution: Felecia Ng Lay Hong & Grace Tan Suet Yee