THE BITS&BYTES

Information and Communication Technology Newsletter
A five-year reflection

IN THIS ISSUE

Chief Editor's Message

by Dr. Mohammed Y.T.Alswaitti

The ICT Department anticipates another exciting year coinciding with the Centenary of Xiamen University. 100 years of education emanated from the values of her founding father: purposeful, able, and incredibly active. XMUM has gone through 5 amazing years under the vision of "Pursue Excellence, Strive for Perfection". Both our faculty and students have contributed to this success through in-house awards, professional conferences, as well as internal and external research fundings. The Department always seeks to attract specialized and talented faculty members to enrich the quality of the programmes offered and further push the knowledge boundaries to meet society's needs.
I hope you read the enclosed articles to learn more about the Department and I encourage you to explore the Department in person if you have the opportunity to do so.

MESSAGE FROM THE ASSISTANT DEAN

Dr. Geetha Kanaparan
Assistant Dean
Information and Communication Technology
School of Electrical and Computer Engineering
Xiamen University Malaysia

Dear readers,

The Information and Communication Technology (ICT) Department in the School of Electrical and Computer Engineering at Xiamen University Malaysia is beyond thrilled to be a part of and to celebrate XMU's 100th anniversary and XMUM's 5th anniversary. Reflecting upon our 5 years, the ICT department is elated to have contributed to the success and growth of XMUM.

Starting from fewer than 10 academics, three ICT Degree programmes - namely Computer Science and Technology (CST), Software Engineering (SWE), and Digital Media Technology (DMT) and 151 students, we have grown to a strong team of 35 academics and more than 1,100students.

We are proud that our first cohort of CST, SWE and DMT students have graduated last year and are now in the industry contributing to the world's digital economy. However, we are not one to rest on our laurels. We have continued to grow with our newest degree programme in the much sought-after and exciting field of Artificial Intelligence. To add to the diverse range of programmes that the ICT discipline has to offer, we are excited to announce that we will be offering programmes in Data Science and Cyber Security soon.

There's more success to be celebrated! As you will see in this newsletter, our team of academics have published high-quality and high-impact papers in various fields of ICT. We have won awards, hosted conferences, organised industry visits, academic talks, seminars and the list goes on. Kudos to the ICT team! Cheers to many more years of success and growth to XMU and XMUM!

Happy Anniversary!

Geetha

Our Programmes & Student Achievements: Bachelor of Engineering in Software Engineering (Honours)

by Assoc. Prof. Dr. Tee Sim Hui

Bachelor of Engineering in Software Engineering (Honours) (hereafter 'SWE') is a four year programme offered by the Department of Information and Communication Technology, XMUM School of Electrical and Computer Engineering. The programme covers a wide spectrum of software engineering-related topics, aiming to equip graduates with a balanced understanding of both the theoretical approaches and their practical implementation.

Software Engineering is one of the crucial domains in Computing. From the perspective of R&D, it can either stand alone as an independent field or blend with other disciplines such as AI, data science, and computer science. SWE academicians have published in several top journals such as the Journal of Systems and Software, Applied Soft Computing, etc. Interdisciplinary research collaboration is also encouraged in the research agenda of the programme.

Industrial talk is one of the important bridging components in R&D. Several industrial talks have been organized successfully to bridge the academy with the latest industrial practice. Among many of the industrial talks and seminars, a talk on "Software Requirements Verification and Validation" was conducted on 25 November 2019 by the founder from AlAin IT Consultants Malaysia (Fig. 1), and a public seminar was delivered by the CEO of Purple Apes Studio on mobile application development (Fig. 2).

Fig. 1.
A talk by Mr. Shahjerome Ambrose, the founder and Quality Director of AlAin IT Consultants Malaysia.

Fig. 2. A public seminar by Mr. Victor Khoo, CEO & founder of Purple Apes Studio

Lastly, it is worthwhile to mention that many SWE graduates have continued to pursue their postgraduate studies in various well-known universities, including:

- The University of Edinburgh
- Johns Hopkins University
- The University of Sydney
- New York University
- The University of Hong Kong
- National University of Singapore
- Nanyang Technological University
- Xiamen University China

Although SWE is still in its infancy, we hope to further strengthen our research in the near future. It is also our hope that some of the FYP can be converted to research papers, thereby increasing the research output of the programme.

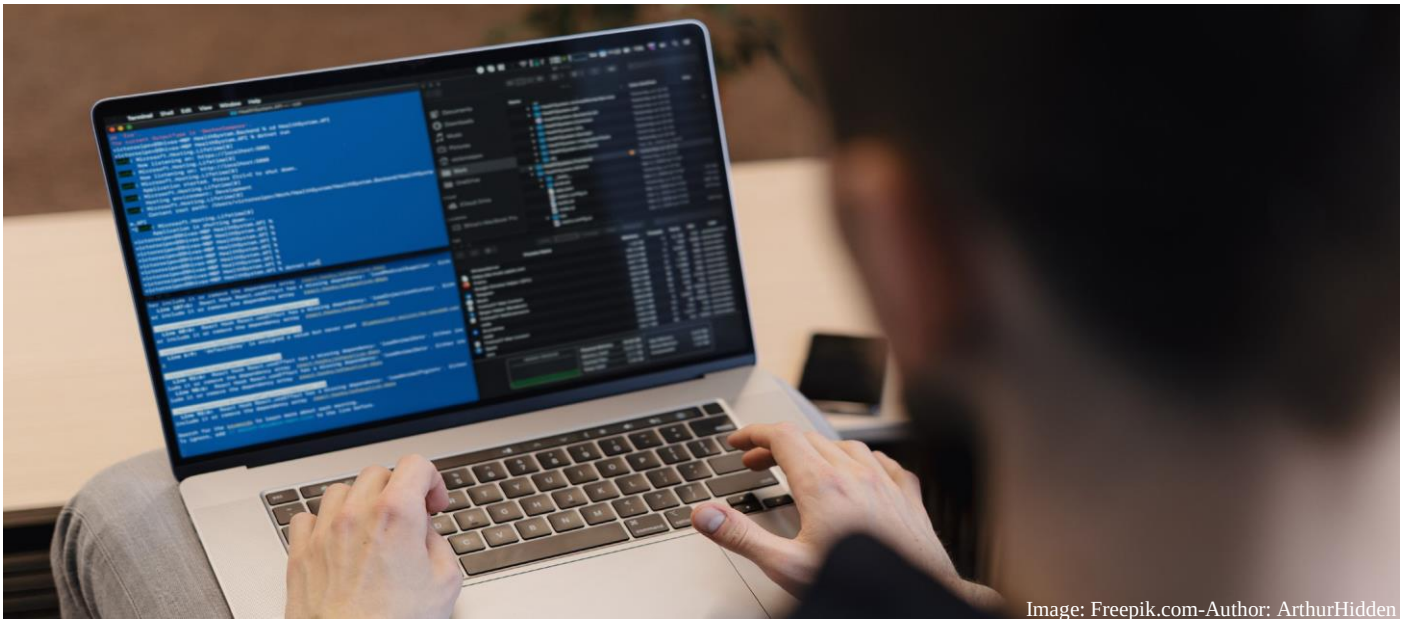

Image: Freepik.com-Author: ArthurHidden

Our Programmes & Student Achievements: Bachelor of Engineering in Computer Science and Technology (Honours)

by Ts. Dr. Teh Jia Yew

Image: Freepik.com-Author: ksandrphoto

The Bachelor of Engineering in Computer Science and Technology (CST) programme at XMUM is a 4-year programme, which was fully accredited by the Malaysian Qualifications Agency (MQA) on 25 Oct 2019.

The first cohort of the programme graduated in September 2020. Apart from those being employed in software and computing-related industries, students keen to pursue postgraduate studies were accepted by many well-established universities, including Nanyang Business School, HKUST Fok Ying Tung Graduate School, Florida University USA and Penn State University, USA.

In terms of research, CST academics have published in reputable SCI journals, i.e. IEEE Access, Intelligent Automation & Soft Computing, in areas such as AI and machine learning applications.

CST programme offers a broad range of courses throughout the 4-year duration, encompassing the following major areas of computer science studies: Algorithms, Computer Systems Architecture & De- sign, Software Engineering, Applications & Systems Programming. The academic-industry activities expose students to industry practices prior to graduation. The School invited Configura for three workshops: “Interior Design Systems Software”, “Employability in the 21st Century” and “How software has an impact on environment – Help the Environment, Be a Programmer”. (Fig 3)

Fig. 3. Configura workshop participants.

In order to provide students with exposure to mobile systems environment, a talk entitled “Mobile Applications Development” was delivered by CEO & Founder Mr. Victor Khoo of Purple Apes Studio.

Students are further exposed to the security aspects of computing via a talk on “Cyberspace and Information Security” by Mr Arun Prasath from Iverson Associates (Fig.4).

Fig. 4.
Talk by Mr Arun Prasath from Iverson Associates

Our industrial visits include: Huawei Customer Solution Innovation & Integration Experience Center (CSIC) – 24 March 2017 (Fig 5) and Malaysian Global Innovation & Creativity Centre (MaGIC) – 10 January 2018 (Fig 6).

Fig. 5. Industry visit to CSIC

Fig. 6. Industry visit to MaGIC

Other activities organized include:

- Future Smart Cities Conference (FSC) in November 2019. (Fig 7)
- XMUM Mobile App Challenge and Product Design Competition – 22 December 2017 (Fig 8)

Fig. 7. Future Smart Cities Conference (FSC)

Fig. 8. XMUM Mobile App Challenge and Product Design Competition

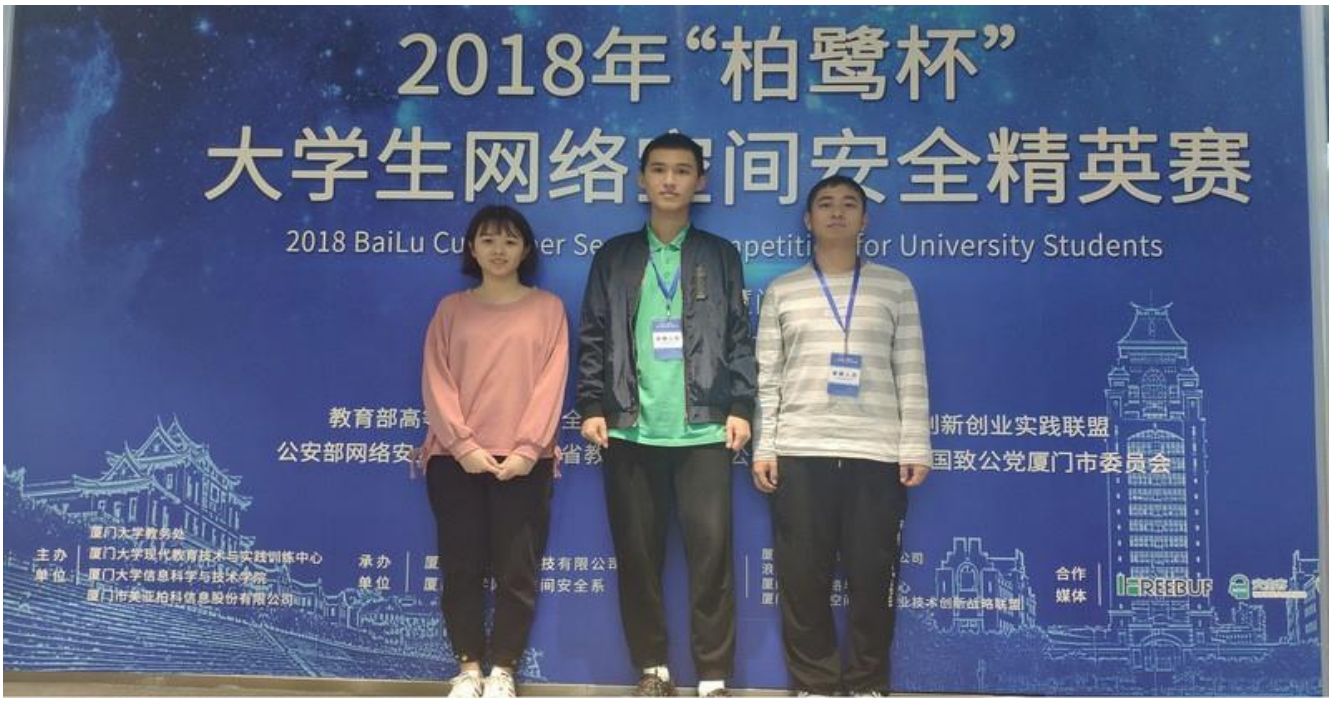

Fig. 9.

The χ team put their cyber security skills to test at 2018 BaiLu Cup Cyber Security Competition.

CST students participated in 2018 BaiLu Cup Cyber Security Competition held at Xiamen University China (XMU) and won the “Excellence Prize” with a reward of RMB 1000 on 24 and 25 November 2018. The χ team consist of 3 CST students: Second year student Bai Haotian and Huang Chonghao, and third year student Huang Xinyi. (by Dr. Yip Chi Kiong)

Our Programmes & Student Achievements: Bachelor of Engineering in Digital Media Technology (Honours)

by Assoc. Prof. Ts. Dr. Yau Wei Chuen

Image by methodshop, Free-Photos and Gerd Altmann from Pixabay and image: Freepik.com

Bachelor of Engineering in Digital Media Technology (Honours) programme (DMT) is one of the ICT programmes initiate in September 2016. In the past five years, students of DMT programme have actively participated in various competitions and conferences. They have demonstrated their research and innovation talents as well as excellent presentation skills by winning numerous prizes at the following competitions:

- 3rd China College Students "Internet+" Innovation and Entrepreneurship Competition, 2017
- ABB Intervarsity Innovation Challenge 2019
- 1st China "Artificial Intelligence Plus" College Students Innovation and Entrepreneurship Competition 2019
- 1st China-Malaysia Youth Innovation and Entrepreneurship Competition, 2019
- 5th China College Students' Internet Plus Innovation and Entrepreneurship Competition, 2019
- 2nd National College Student Tourism Design Competition, 2019
- Contemporary Undergraduate Mathematical Contest in Modeling, 2019
- 6th China International College Students' "Internet+" Innovation and Entrepreneurship Competition, 2020

The first batch of DMT students graduated in 2020, among which many are pursuing their postgraduate studies in world-famous universities, such as Nanyang Technological University, University of Edinburgh and Fudan University.

Fig. 10.
DMT student, Gan Qi Wen,was the top 5 finalist in ABB Intervarsity Innovation Challenge 2019 for his proposal on 5G Broadcasting and Interacting System

Fig. 11.
DMT and CST students won the first prize in 2nd National College Student Tourism Design Competition, 2019 (From left to right: Xie Chenlei (DMT), Lin Fengze (DMT), Zou Ziyun (DMT), Lai Yihan (CST), Pan Ruoxuan (DMT))

Fig. 12.
DMT student, Wang Jingyi, was one of the team members that won the second prize in the 1st China-Malaysia Youth Innovation and Entrepreneurship Competition, 2019

Fig. 13.
DMT students participated and presented papers in an international conference (second left: Pan Chuting, first and second right: Wu Dayong, Wang Jingyi)

Fig. 14.
From the top: Dr.Ahmad Affandi Supli
From the middle left: Zhang Hanzhi (Team Leader from CST), Zhong Yuting (DMT), He Jie (DMT).
From the bottom left: Zhu Mengdie (DMT) and Zhu Mengyao (DMT)

At the 5G Season of OPPO TOP University Innovation and Technology Competition, XMUM teams won one Third prize and three Finalist Prizes. “Your Third Eye” (三目), won Third Prize in Human-Computer Interactive Category and a cash prize of RM 10,000. (by Dr. Yip Chi Kiong)

Fig. 15.
Sixth Sense Team Members with their award-winning project Competition, 2019

XMUM teams won four bronze prizes at the 5th China College Students' Internet Plus Innovation and Entrepreneurship Competition, one of the largest university-level innovation and entrepreneurship competitions in the world. The ICT team representing XMUM is: "Sixth Sense" Innovative Non-Destructive Antiques Identification Solution. (by Dr. Yip Chi Kiong)

Our Programmes & Student Achievements: Bachelor of Engineering in Artificial Intelligence (Honours)

by Dr. Chua Chong Chai

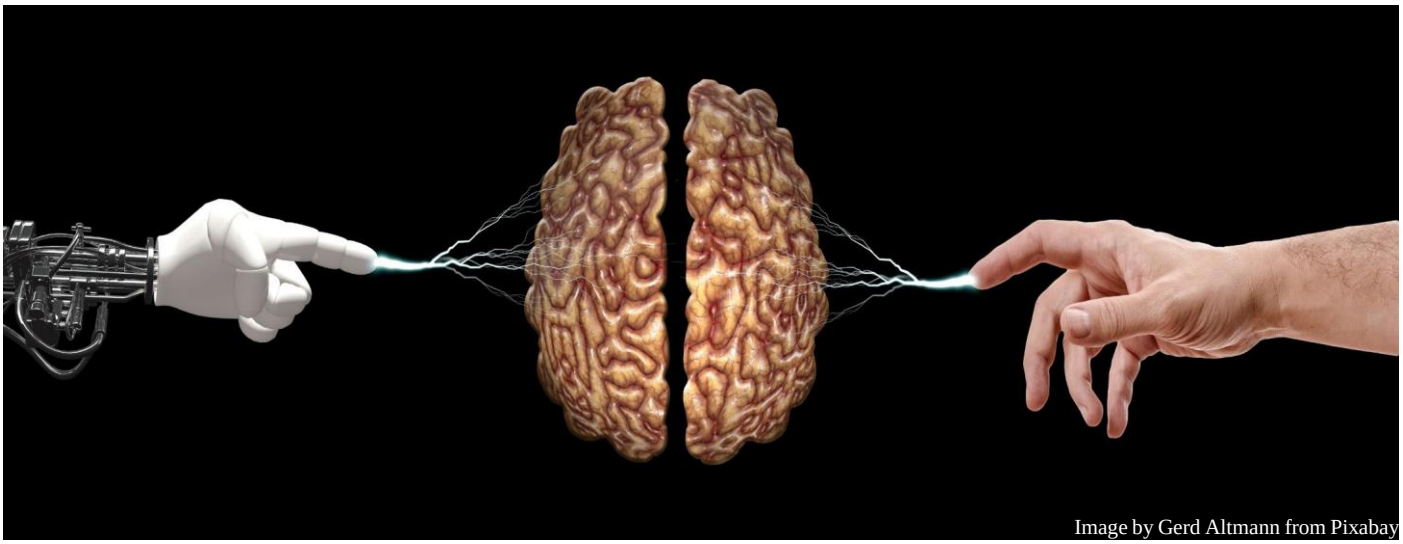

Image by Gerd Altmann from Pixabay

On 14 May 2020, the Department of Information and Communication under the School of Electrical and Engineering successfully received the Probationary Accreditation (PA) from the Malaysia Qualification Agency (MQA) to conduct the Bachelor of Engineering in Artificial Intelligence (Honours) (hereafter 'AIT') programme.

The AIT programme is a 4-year full-time programme designed to produce graduates with the capability of delivering Artificial Intelligence solutions as intelligence system engineers and designers for industrial applications. Hence, under the AIT programme, a wide range of courses will be offered with a balance between theories and practical aspects to equip students with the knowledge and skills in AI-related fields, such as Machine Learning, Deep Neural Network, Natural Language Processing, Computer Vision, Deep Reinforcement Learning, Computational Cognitive Science, etc.

As of 2021/04 semester, a total of 69 students (30 international students and 39 local Malaysia students) are enrolled in the AIT programme. The number of students for AIT programme is expected to grow in time. We are looking forward to having more experts in different areas related to Artificial Intelligence to join our teaching force in the near future.

OUR FACULTY ACHIEVEMENTS

Image by JL G from Pixabay

Dr. Yip Chi Kiong Receives Malaysia Toray Science Foundation Award for Two Consecutive Years

by Dr. Yip Chi Kiong

Dr. Yip Chi Kiong from Department of Informational and Communication Technology, XMUM, received an RM 2,000 consolation prize from Malaysia Toray Science Foundation (MTSF) under the Science Education Award category on 25 November 2019. The award is for his research “Controlling a Greenhouse using Sensors for Optimum Growth of Plants”.

Fig. 16.
Dr. Yip Chi Kiong (1st right) was receiving the MTSF award.

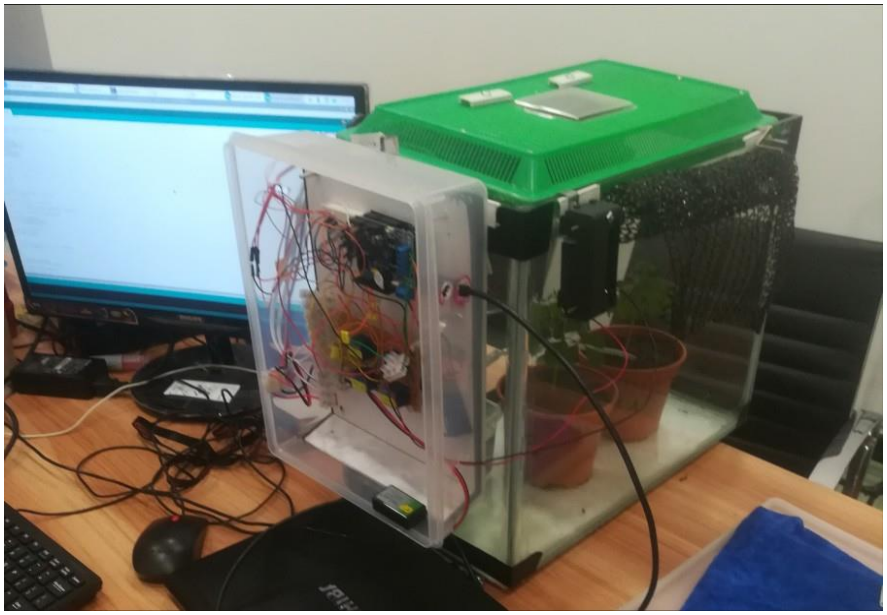

Fig. 17.
Setup for Controlling a Greenhouse using Sensors for Optimum Growth of Plants

On 25 September 2020, Dr. Yip Chi Kiong again received an RM 2,000 consolation prize from Malaysia Toray Science Foundation (MTSF) under the Science Education Award (SEA) category. This award is for his research “Using Internet of Things to conduct risky experiments in a protected environment”.

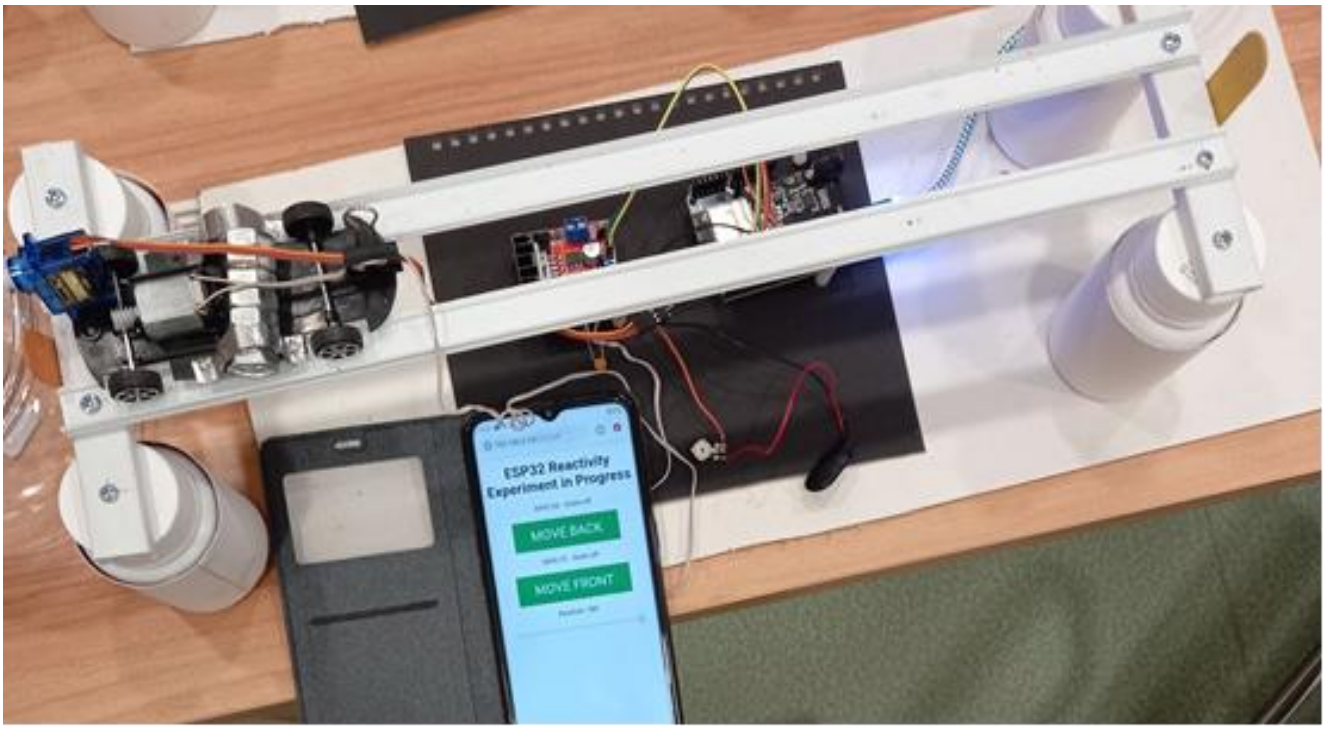

Fig. 18.
Research “Using Internet of Things to conduct risky experiments in a protected environment”.

OUR RESEARCH AND PUBLICATIONS

Our Research and Publications: Significant Achievements

by Dr. Siddique Kamran

TOTAL PUBLICATIONS - 46

2017 – 5

2018 – 6

2019 – 14

2020 – 21

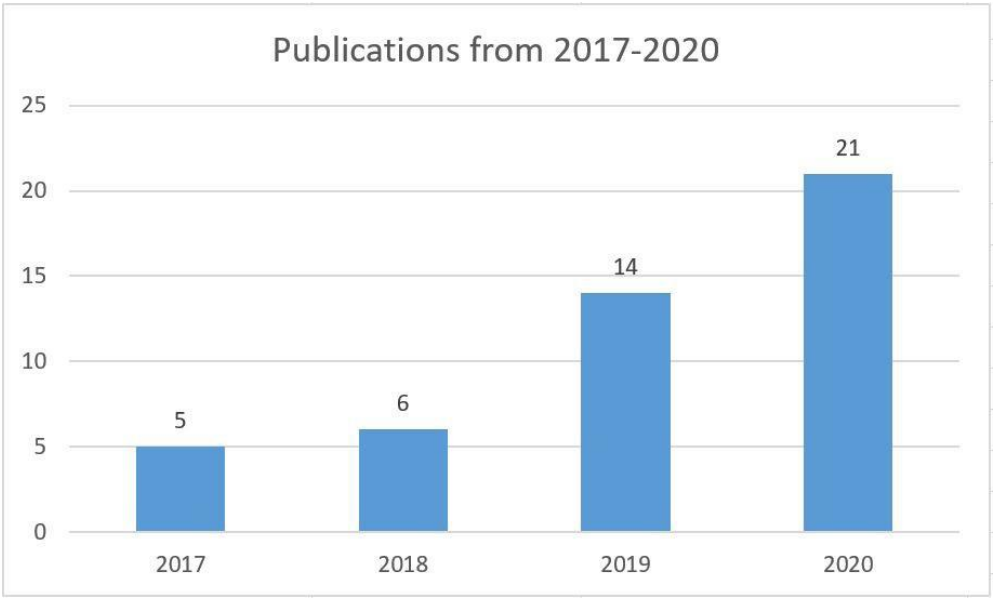

Fig. 19.
Publication from 2017 - 2020

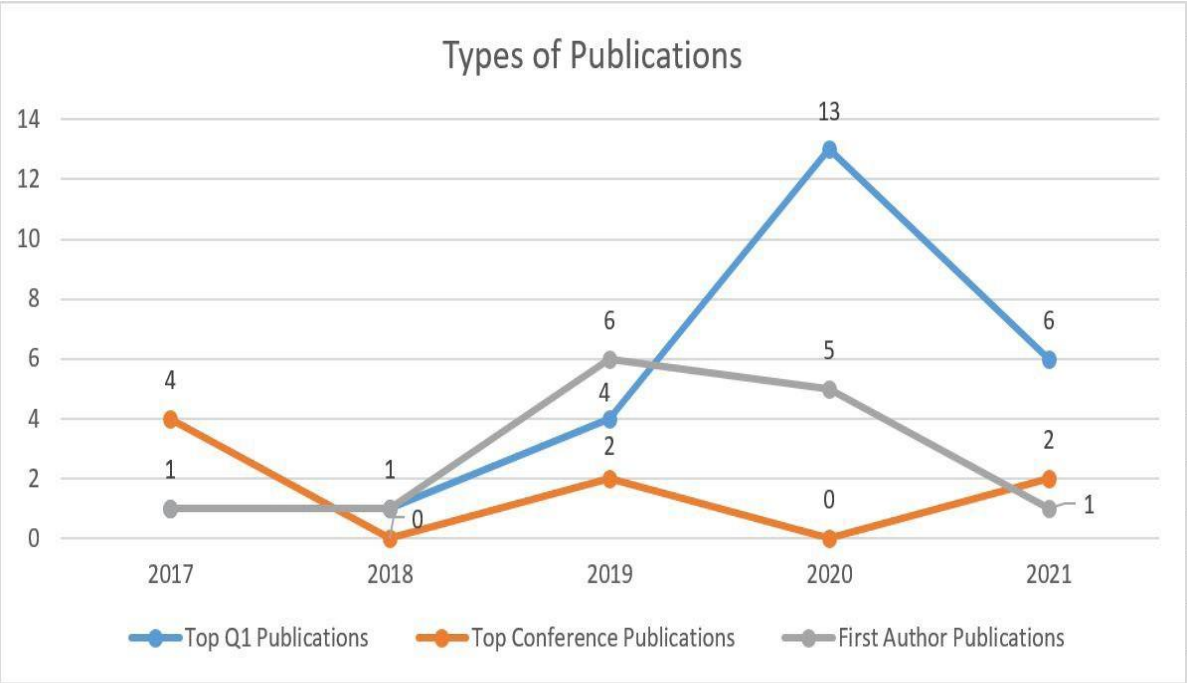

Fig. 20.
Types of publications

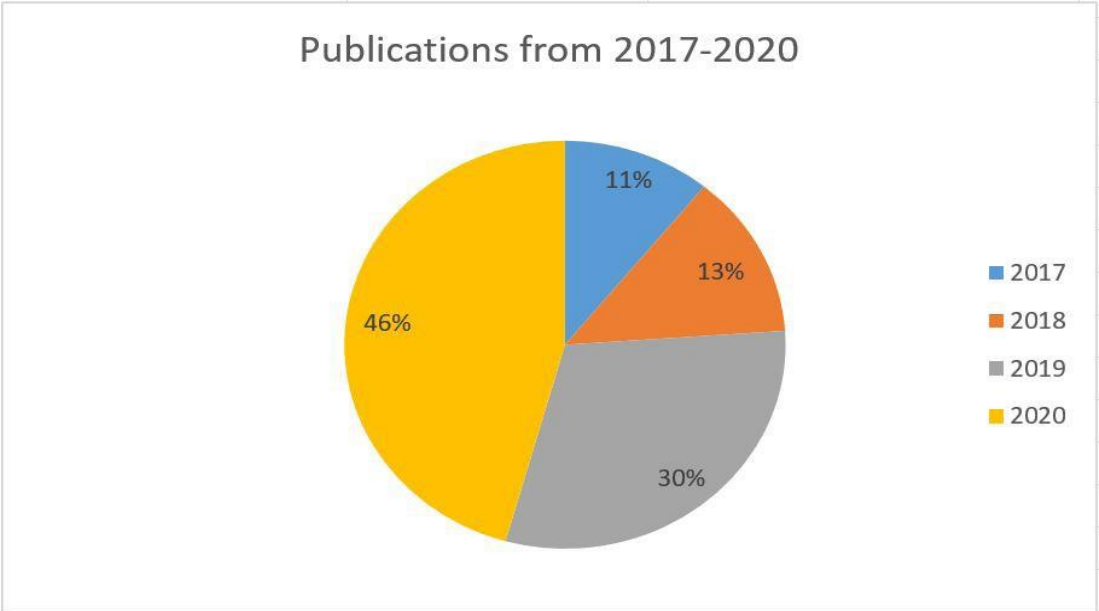

Fig. 21.
Publications from 2017 - 2020

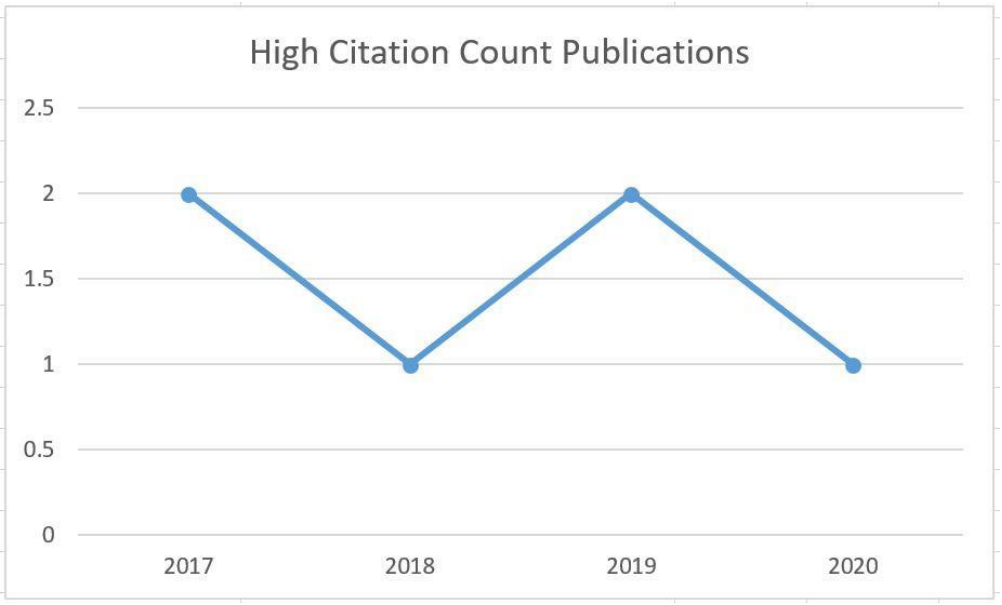

Fig. 22.
High Citation Count Publications

Our Research and Publications: Top Journal (Q1) Publication

by Dr. Siddique Kamran

PUBLICATIONS	CITATIONS
Poh, G. S., Chin, J. J., Yau, W. C., Choo, K. K. R., & Mohamad, M. S. (2017). Searchable symmetric encryption: designs and challenges. ACM Computing Surveys (CSUR), 50(3), 1-37	80
Tan, G. W. H., Lee, V. H., Hew, J. J., Ooi, K. B., & Wong, L. W. (2018). The interactive mobile social media advertising: an imminent approach to advertise tourism products and services?. Telematics and Informatics, 35(8), 2270-2288.	59
Siddique, K., Akhtar, Z., Khan, F. A., & Kim, Y. (2019). KDD Cup 99 data sets: a perspective on the role of data sets in network intrusion detection research. Computer, 52(2), 41-51.	41
Alswaitti, M., Albughdadi, M., & Isa, N. A. M. (2019). Variance-based differential evolution algorithm with an optional crossover for data clustering. Applied Soft Computing, 80, 1-17.	25
Akhtar, Z., Siddique, K., Rattani, A., Lutfi, S. L., & Falk, T. H. (2019). Why is multimedia quality of experience assessment a challenging problem?. IEEE Access, 7, 117897-117915.	10
Tee, SH. Mechanisms and generative material models. Synthese (2019). https://doi.org/10.1007/s11229-019-02454-9	1
Tee, SH. Representation-supporting model elements. Biol Philos 35, 25 (2020). https://doi.org/10.1007/s10539-020-9743-6	
Wong, L. W., Leong, L. Y., Hew, J. J., Tan, G. W. H., & Ooi, K. B. (2020). Time to seize the digital evolution: Adoption of blockchain in operations and supply chain management among Malaysian SMEs. International Journal of Information Management, 52, 101997.	64
Wong, L. W., Tan, G. W. H., Lee, V. H., Ooi, K. B., & Sohal, A. (2020). Unearthing the determinants of Blockchain adoption in supply chain management. International Journal of Production Research, 58(7), 2100-2123.	18
L. W. Wong, G. W. H. Tan, V. H. Lee, K. B. Ooi and A. Sohal (2021). Psychological and System-Related Barriers to Adopting Blockchain for Operations Management: An Artificial Neural Network Approach, IEEE Transactions on Engineering Management, 10.1109/TEM.2021.3053359.	
Alrosan, A., Alomoush, W., Norwawi, N., Alswaitti, M., & Makhadmeh, S. N. (2020). An improved artificial bee colony algorithm based on mean best-guided approach for continuous optimization problems and real brain MRI images segmentation. Neural Computing and Applications, 1-27.	2

PUBLICATIONS	CITATIONS
Hew, J. J., Wong, L. W., Tan, G. W. H., Ooi, K. B., & Lin, B. (2020). The blockchain-based Halal traceability systems: a hype or reality?. Supply Chain Management: An International Journal.	8
Asghar, M. A., Khan, M. J., Rizwan, M., Mehmood, R. M., & Kim, S. H. (2020). An Innovative Multi-Model Neural Network Approach for Feature Selection in Emotion Recognition Using Deep Feature Clustering. Sensors, 20(13), 3765.	4
Kim, S. H., Yang, H. J., Nguyen, N. A. T., Mehmood, R. M., & Lee, S. W. (2020). Parameter Estimation Using Unscented Kalman Filter on the Gray-Box Model for Dynamic EEG System Modeling. IEEE Transactions on Instrumentation and Measurement, 69(9), 6175-6185.	2
Gan, Y. S., Wei, L., Han, Y., Zhang, C., Huang, Y. C., & Liong, S. T. (2021). A statistical approach in enhancing the volume prediction of ellipsoidal ham. Journal of Food Engineering, 290, 110186.	
Wu, X., Guo, S., Xing, G., Liao, M., Chang, C. C., & Yau, W. C. (2020). Information hiding in motion data of virtual characters. Expert Systems with Applications, 159, 113516.	
Xiao, H. (2020). Hungarian layer: A novel interpretable neural layer for paraphrase identification. Neural Networks, 131, 172-184.	
Mehmood, R. M., Yang, H. J., & Kim, S. H. (2020). Children Emotion Regulation: Development of Neural Marker by Investigating Human Brain Signals. IEEE Transactions on Instrumentation and Measurement, 70, 1-11.	1
Gan, Y. S., Chee, S. S., Huang, Y. C., Liong, S. T., & Yau, W. C. (2020). Automated leather defect inspection using statistical approach on image intensity. Journal of Ambient Intelligence and Humanized Computing, 1-17.	
Al-Dhaqm, A., Abd Razak, S., Siddique, K., Ikuesan, R. A., & Kebande, V. R. (2020). Towards the Development of an Integrated Incident Response Model for Database Forensic Investigation Field. IEEE Access, 8, 145018-145032.	4
Al-Dhaqm, A., Abd Razak, S., Dampier, D. A., Choo, K. K. R., Siddique, K., Ikuesan, R. A., ... & Kebande, V. R. (2020). Categorization and organization of database forensic investigation processes. IEEE Access, 8, 112846-112858.	9
Guo, L., Yang, X., & Yau, W. C. (2021). TABE-DAC: Efficient Traceable Attribute-Based Encryption Scheme With Dynamic Access Control Based on Blockchain. IEEE Access, 9, 8479-8490.	
Lakhan, A., Ahmad, M., Bilal, M., Jolfaei, A., & Mehmood, R. M. (2021). Mobility Aware Blockchain Enabled Offloading and Scheduling in Vehicular Fog Cloud Computing. IEEE Transactions on Intelligent Transportation Systems.	
Asghar, M. A., Khan, M. J., Shahid, H., Shorfuzzaman, M., Xiong, N. N., & Mehmood, R. M. (2021). Semi-Skipping Layered Gated Unit and Efficient Network: Hybrid Deep Feature Selection Method for Edge Computing in EEG-Based Emotion Classification. IEEE Access, 9, 13378-13389.	
Tubishat, M., Ja'afar, S., Alswaitti, M., Mirjalili, S., Idris, N., Ismail, M. A., & Omar, M. S. (2021). Dynamic salp swarm algorithm for feature selection. Expert Systems with Applications, 164, 113873.	8

PUBLICATIONS	CITATIONS
Albughdadi, M., Rieu, G., Duthoit, S., & Alswaitti, M. (2021). Towards a massive sentinel-2 LAI time-series production using 2-D convolutional networks. Computers and Electronics in Agriculture, 180, 105899.	
Khanum, Shaheena, Muhammad Adeel Ashraf, Asim Karim, Bilal Shoaib, Muhammad Adnan Khan, Rizwan Ali Naqvi, Kamran Siddique, and Mohammed Alswaitti. "Gly-LysPred: Identification of Lysine Glycation Sites in Protein Using Position Relative Features and Statistical Moments via Chou's 5 Step Rule."	
Guo, L., Li, Z., Yau, W. C., & Tan, S. Y. (2020). A decryptable attribute-based keyword search scheme on eHealth cloud in Internet of things platforms. IEEE Access, 8, 26107-26118.	5

Our Research and Publications: Top Conference Publications

by Dr. Siddique Kamran

PUBLICATIONS	CITATIONS
Pang, L. L., Wong, K. S., & Liong, S. T. (2017, December). Data embedding in scalable coded video. In 2017 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC) (pp. 1190-1194). IEEE.	3
Harerimana, R., Tan, S. Y., & Yau, W. C. (2017, May). A Java implementation of paillier homomorphic encryption scheme. In 2017 5th International Conference on Information and Communication Technology (ICoIC7) (pp. 1-6). IEEE.	8
El Amrani, M. Y., Rahman, M. H., Wahiddin, M. R., & Shah, A. Towards an accurate speaker-independent Holy Quran acoustic model. In 2017 4th IEEE International Conference on Engineering Technologies and Applied Sciences (ICETAS) (pp. 1-4). IEEE.	
Liong, S. T., & Wong, K. (2017, December). Micro-expression recognition using apex frame with phase information. In 2017 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC) (pp. 534-537). IEEE.	24
Li, Y., Chau, K. T., Wei, Z., & Kang, Q. (2019, January). A comparative study on two XML editors (oxygon and ultraedit). In Proceedings of the 3rd International Conference on Cryptography, Security and Privacy (pp. 284-287).	1
Zhang, Y., Chau, K. T., Xu, J., & Liu, C. (2019, January). An investigation into the attractiveness level of commercial website for visitors: a case study on 66rpg website. In Proceedings of the 3rd International Conference on Cryptography, Security and Privacy (pp. 99-102).	2
Kanaparan, G., & Strode, D. (2021, January). A Theory of Coordination: From Propositions to Hypotheses in Agile Software Development. In Proceedings of the 54th Hawaii International Conference on System Sciences (p. 6795).	
Salam I., Law K.Y., Xue L., Yau WC. (2021) Differential Fault Based Key Recovery Attacks on TRIAD. In: Hong D. (eds) Information Security and Cryptology – ICISC 2020. ICISC 2020. Lecture Notes in Computer Science, vol 12593. Springer, Cham. https://doi.org/10.1007/978-3-030-68890-5_15	
FIRST AUTHOR PUBLICATION OTHER THAN Q1	
Tee, S. H. (2018). Mechanism diagrams and abstraction-by-aggregation. Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences, 71, 17-25.	

Our Research and Publications: Student Publications

by Dr. Siddique Kamran

PUBLICATIONS
Zhou, Z., Akhtar, Z., Man, K. L., & Siddique, K. (2019). A deep learning platooning-based video information-sharing Internet of Things framework for autonomous driving systems. International Journal of Distributed Sensor Networks, 15(11), 1550147719883133.
Gan, Y.S., Chee, SS., Huang, YC. et al. Automated leather defect inspection using statistical approach on image intensity. J Ambient Intell Human Comput (2020).

OUR CONFERENCES

Image by JL G from Pixabay

2nd International Conference on Future Smart Cities Held at XMUM

by Dr. Mohammed Y.T.Alswaitti

The 2nd International Conference on Future Smart Cities was hosted by XMUM from 5 to 7 November 2019, in collaboration with International Experts for Research Enrichment and Knowledge Exchange (IEREK) in Egypt. This event aims to bridge the research-industry gap and address key issues regarding effective sustainable living and development.

The conference brought together 168 full papers and abstracts from academics, scientists, industry experts, and engineers from 49 countries including the USA, Canada, Germany, etc. Topics discussed ranged from the development of cities, transportation, sustainability, architecture, engineering, and computing techniques to the anticipated impact of such major changes on the environment. Selected papers were published in the ASTI book series by Springer, or in a special issue in Smart and Sustainable Built Environment published by Emerald Publishing.

Fig. 23.
Dr. Zhang Ying delivered a speech during the opening ceremony

Fig. 24.
Group photo of the conference participants after theclosing ceremony

XMUM Co-hosts the 3rd International Conferences on Future Smart Cities

by Dr. Mohammed Y.T.Alswaitti

Fig. 25.
Opening ceremony of FSC and RRAU virtual conference 2020

The 3rd International Conference on Future Smart Cities (FSC) & Resilient and Responsible Architecture and Urbanism (RRAU) was hosted by XMUM from 14 to 15 November 2020, with International Experts for Research Enrichment and Knowledge Exchange (IEREK) as the collaborative partner. The conference was held online due to the COVID-19 pandemic.

The conference brought together papers from academics, scientists, industry experts, and engineers from more than 10 countries including Australia, Switzerland, Poland, India, etc.

Selected papers were published in the Advances in Science, Technology, and Innovation(ASTI) book series published by Springer or The International Journal of Proceedings of Science and Technology (Resourceedings) published online by IEREK Press.

Fig. 26.
Keynote presentations

Fig. 27.
XMUM undergraduate students delivering presentations on their research

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