FOREWORD

It gives me great pleasure to welcome all of you at the Opening Ceremony of the Second Undergraduate Research Conference (URC2021). I would also like to congratulate the School of Computing, Nilai University and IEEE CESoc Malaysia Chapter for convening this Conference

First of all, I would like to extend a warm welcome to our distinguished guests and key note speakers: Associate Prof Dr.Thinagaran Perumal, Chairman, IEEE CESoc Malaysia Chapter, UPM, Associate Prof Ts. Dr. Yasir bin Mohd Mustafah, Deputy Dean (Academic Management and Admission Division) , IIUM, Associate Prof Mohd Zalisham bin Jali, Deputy Dean (Research and Innovation), USIM, Dr. Bavani Ramayah, Secretary, IEEE CESoc Malaysia Chapter, University of Nottingham Malaysia, Mr Ahmad Firdaus bin Mohamad Tahir, Cloud Comrade Malaysia, Mr. Vernon Joseph Fernandez, MDEC, Mr. Mohd Jalallul Alam @Jasni Zain bin Mohd Isa, MDEC, Ms. Khairunnisa binti Saharuddin, MDEC, Mr. Tamilhselvan Kuppan, MBITS digital and Mr. William Chu Zhi Ming, CTC Global Sdn. Bhd

The objectives of this conference are mainly to provide a platform for students to engage in research, to provide an exposure for students on the issues within the industry that warrant research, to equip students with necessary skills in presenting their research findings and to foster the exchange of information and networking amongst industries, academicians and students.
Technology has transformed the way we live over the years. As new technologies emerge, a necessity exists to embrace them for as these discoveries ultimately enhance life and brings significant change to our social and business environment. There is no doubt that intelligent and resilient technologies influenced almost every sector and play an important role in shaping today's business and society for tomorrow.

Based on the theme of the Conference: Intelligent and Resilient Technologies in Computing, we have gathered here to widen our knowledge on existing emerging technologies and how we can benefit from them. This is crucial as we need to keep abreast with the rapid pace of innovation in technology which would culminate in a completely unconventional future that we may not be familiarly with. Thus it is important to engage our undergraduates in research and innovation in preparing for the life ahead of them. The global COVID-19 has fundamentally changed the way we work, the way we live and socializes. The shift from face to face to virtual is the only possible way to curb the spreading of the virus. This has caused a dramatic increase in the demand of the digital technologies and connectivity.

Digital technologies such as Cloud, Internet-of-Things (IoT), Blockchain (BC), Artificial Intelligence (AI), and Machine Learning (ML), being adopted by many organizations as part of their transformation effort during the pandemic. Blockchain (BC) technology presents an opportunity to create secure and trusted information control mechanisms such as certificate, health records, medical records and prescriptions, and contracts – how these contracts / certificates / records are authenticated and what must be encrypted and shared and how security will be managed.

A chatbot, is an artificial intelligence (AI) feature that interacts with customers like a human. Chatbots attend to customers at all times of the day and week and are not limited by time or a physical location. This makes its implementation appealing to a lot of businesses that may not have the manpower or financial resources to keep employees working around the clock.

An increase in digitalization is leading firms and educational institutions to shift to work-from-home. Workplace monitoring and technostress issues will become prominent with an increase in digital presence. The pandemic has created a scenario of insecurity that is inviting fraudsters to exploit the crisis situation by extracting money or information or by creating vulnerabilities. Many users are beginning to rely on digital resources extensively, some for the first time, and are becoming targets for fraud and scams. Online fraud, scams, intrusion and security breaches are likely to grow. The regulation of the internet, a key resource, will be crucial post-pandemic. Organizations and governments are aware of this threat and are taking countermeasures – for instance, some governments took a strong stand against Zoom sessions for education, forcing the platform provider to upgrade security.

So, we can see the intelligent and resilience technology is set to be part of our daily lives in new and different ways. Virtual Reality and Augmented Reality are becoming more practical with the innovation of hardware that supports smart technologies. On top of it, the digital revolution promises immersive experiences. If you are not able to cope up in this space you are going to be left behind. The future for computing professionals is indeed very bright. With the rapid expansion of the ICT sector in Malaysia the demand for skilled graduate in this field is also increasing, especially in Artificial Intelligence, Cloud Computing and Big Data. There are a lot of new jobs requiring mastering of new skills. For the continuous development of our country, it is imperative that a well-equipped skilled workforce is generated to operate emerging digital technologies. With that in mind, we endeavor to groom graduates that are preparing to face changes and innovation in technology in line with country's need for the future.

I would like to give special praise and congratulations to the School of Computing for their efforts in organizing this second Undergraduate Research Conference (URC2021).

In closing, I wish you every success and good health, stay safe and follow the SOP.

Thank you very much.

Dato' Dr. Azhar bin Ismail
Vice- Chancellor, Nilai University