



Yap Kok Hau (in black shirt) and Yap Jin Zhe configuring the software that controls Prof Nao's movement.

## Keeping up with emerging technologies

MORE human employees will work alongside robotic colleagues as the employment landscape in Malaysia will change drastically during the Fourth Industrial Revolution.

The Fourth Industrial Revolution combines the physical, digital and biological worlds – creating a new range of technologies that is “human-friendly”.

The Internet of things, augmented reality, artificial intelligence (AI) and automation are some of the emerging technologies that have begun to reshape advancement in technology and global economy.

The revolution builds on the previous revolutions, changing the world's socio-economic landscape.

With a proven track record of 49 years of academic excellence, Tunku Abdul Rahman University College (TAR UC) is embracing the Fourth Industrial Revolution by continuing to readapt its programme curriculum.

The aim is to prepare the students for the digital economy in the future so that they will be able to keep abreast of the latest development and technologies and remain sought after in the industries when they graduate.

TAR UC's position as one of the leading institutions of higher learning in the field of information and communication technology is cemented by being recognised as a “premier digital tech university” by the Malaysia Digital Economy Corporation and the Higher Education Ministry in 2017.

Realising the significance of robotics and AI in future industries such as financial technology, TAR UC's Faculty of Computing and Information Technology (FOCS) revisits and enhances its programme curriculum to equip computing students with skills and knowledge required for tomorrow's industries.

An example is the student research robot project named Prof Nao, which enables students to experience state-of-the-art humanoid robot research and development at FOCS' Computational Intelligence Research Lab.

“Interactive robots like Professor Nao have the potential for commercialisation in many industries in Malaysia,” commented senior lecturer Dr Tang Tiong Yew from the Department of Computer Science and Mathematics in FOCS.

“Students are able to use Prof Nao as a communication medium where various advanced AI software components can be



Dr Tang: ‘Interactive robots have the potential for commercialisation in many industries.’

programmed to simulate a natural conversation between robots and humans.”

Third year Bachelor of Information Technology (Hons) in Software Systems Development students Yap Jin Zhe and Yap Kok Hau had the opportunity to work on their final year project with Prof Nao.

Both have shown keen interest on the advancement in digital technologies, honing their skills and experience for better career prospects.

“Being given the chance to work on Prof Nao gives me a deeper insight into robotics related field which will afford me an added advantage when it

comes to employability as I already possess the basic knowledge and skills that employers are looking for and it will be easier for me to familiarise myself in this area,” said Yap.

“TAR UC's comprehensive facilities fully support the completion of our final year project.

“Dr Tang, who is knowledgeable in robotics, is able to guide us through our progress and increase our knowledge on the subject.”

Yap said that being able to work on Prof Nao is a new experience for him: “After working with it, I was able to master a new programming language and other skills which I believe will benefit me in the future when more and more industries start adopting robotic technologies.

“From this experience, we got hands-on exposure on robotics and process automation. It gave us in-depth knowledge of how the robot itself functions and how to configure the software that controls it”, he concluded.

TAR UC's FOCS currently offers diploma and bachelor's degree programmes in computer science, information systems and information technology disciplines.

Additionally, FOCS' academic collaboration with Campbell University, the US, offers Dual Award programme to students, enabling them to obtain two qualifications – one from TAR UC and another from Campbell University.

The May intake is currently in progress and attractive scholarships are available on the basis of academic merit and sibling discount for qualified students.

■ To explore programmes offered by FOCS, visit its booth during major education fairs nationwide or go to <http://www.tarc.edu.my/>