



Lee, a TAR UMT alumnus who has a successful career in the UK. — TAR UMT

# Beyond education

➤ TAR UMT prepares students for new careers in technology

**T**UNKU Abdul Rahman University of Management and Technology (TAR UMT)'s "Beyond Education" philosophy aims to provide students with valuable experiences, industry exposure and soft skills development, in addition to traditional academic learning.

TAR UMT's Faculty of Engineering and Technology (FOET) is no exception to this approach, offering a range of degree, master's and PhD programmes that are continuously improved and expanded to align with industry developments, thus giving its graduates an edge in the employment sector.

TAR UMT's FOET graduate, successful Chip Design Engineer Samuel Lee works at NVIDIA, an American technology company based in the UK known for its advances in gaming technology.

Although Lee's journey began with his undergraduate degree in Electronics Engineering at TAR UMT, what really prepared him for a future career in chip design was the advice of his final year project (FYP) supervisor Dr Lim Li Li, current Dean of FOET.

This advice had a profound impact on his final career path, which finally led to his present success story as a Chip Design Engineer.

Dr Lim's guidance led Lee to pursue a Master of Science in Telecommunications in the UK, which proved to be a wise decision as it opened doors to a highly successful career in the UK, developing the

latest in chip technology.

Lee's fond memories of his undergraduate FYP, which he completed under Dr Lim's supervision, demonstrates the quality of teaching and support he received at TAR UMT.

"Dr Lim encouraged me to further my postgraduate studies in the UK and looking back, that proved to be a valuable piece of advice, that helped me gain a rewarding career in the UK now," he shared.

Even after graduating from the then TAR College more than 10 years ago, Lee made it a point to stay in touch with Dr Lim.

"The initial idea for my FYP was to use Field-Programmable Gate Array (FPGA) to implement a micro mobile communications network. Dr Lim turned down my idea because using FPGA was costly and as engineers, it is important to be both innovative and ensure the solutions provided are cost-effective. She then bounced off her idea of a FYP, based on implementing a custom turbo decoding algorithm.

"The project ideally would require two students to complete, as the work and effort for the project is somewhat similar to a Master's degree project. However, after not being able to find another student to join me, I decided to take on Dr Lim's idea as my FYP on my own initiative, and Dr Lim became my supervisor."

"The project involved mathematical equations broken down into smaller functions and the use of Very High-Speed Integrated Circuit Hardware Description Language (VHDL) for the implementation of the algorithm. I must admit that the project was challenging but the knowledge I gained made it worthwhile.

"In fact, my experience in VHDL impressed my master's degree professor and he took me on as a

project student. And it is also through this project that I developed an interest in digital circuit design, and I am grateful that I now have a career in this very area," Lee added.

When Lee recently returned to Malaysia, he visited Dr Lim at TAR UMT. "It was great to meet up with Dr Lim after many years and I was happy to note that she is now the Dean of the faculty. I am confident that like me, many future TARCians will benefit from her leadership and commitment towards students' development."

"I am also amazed that TAR UMT has expanded its engineering programmes to include degree, master's degree and PhD, as well as continuing to improve and strengthen its programmes to stay relevant to industry developments. For example, the Bachelor of Electronics Engineering Technology (Hons) which I am familiar with consists of courses such as Data Science, Cloud Computing and Machine Learning which are very relevant skills for the world of engineering and technology today, including the industry that I am in.

"I am also happy to know that the Faculty maintains important fundamentals like Principles of Electrical and Electronic Engineering, Circuit Theorem and Digital/Analogue Electronics. These subjects are key to helping engineering students build a strong foundation before they can move forward to higher levels," said Lee.

**For more information about TAR UMT's engineering and technology programmes, please call +6011-10825613 and +6011-10597120 or log on to [www.tarc.edu.my](http://www.tarc.edu.my) for information about TAR UMT and to apply online. Various financial aid and merit scholarships are available for qualified students.**

