



# Outstanding achievements

> AeU's IndD graduate shares his views on Technopreneurism and Innovation

R TAN TEIK KHEONG, a graduate of Asia e University's (AeU) Industrial Doctorate (IndD) degree is a technopreneur and educator. A trained electrical and software engineer, and founder of several startups, and author on technical and marketing journals, Tan's passion for big data science in engineering disciplines and analysing financial markets won him an award in London and several nominations. He was recently conferred the title of "Senior Corporate Fellow" by AeU for his outstanding achievements.

#### **PRESTIGIOUS AWARD**

I represented AeU and won among the top three awards in global hedge fund competition in London in 2014. It was my first attempt and an eye-opening experience to apply quantitative skills combined with Bayesian analysis for Big Data in the finance industry, which enabled the fund to maintain its high net return in both bullish and bearish markets. Part of this work was presented in 2015 and 2016 where I spoke as a panel member on 5G Landscape at IEEE (the world's largest professional association for the advancement of technology) conference.

The bulk of my IndD research stems from tracking the companies in the S&P 500 with results averaging net return of almost 65%. This winning methodology and statistical analysis with Bayesian methodology provides a powerful predictive analytic capability that has a success rate exceeding 85% for 2015 and so far it has achieved a 90% success rate for 2016.

None of this would be possible if I had accepted the PhD offer from Stanford as it requires more time commitment in the Silicon Valley, California where I spent the last 20 years plus five years with AT&T Bell Laboratories (New Jersey), thereafter as an executive in Philips Semiconductor, GCT Semiconductor and 3Com and VP of product development with YTL Communications. Now as a chief executive of Oceana Ventures, an engineering and investment services company, my business revolves around the electronics industry which requires me to travel to Taiwan, South Korea, Japan and China. I was happy to enrol in AeU's IndD programme where I was able to work and pursue my doctorate degree with flexibility despite my busy schedules.

Why Finance? I benefited greatly from two well accomplished supervisors, Prof Dr Merouane Lakehal, (Rochester Institute of Technology, New York) who was at that time appointed as an advisor

to Bank Negara and Scott Connor, a former market maker for 30 years at the Chicago Board of Options Exchange imparted valuable knowledge to my research. One of my three reviewers commended me as "The candidate who did an outstanding job and he has brought merit and distinction to AeU's IndD programme".



# TRANSFORMING THE TECHNOLOGY LANDSCAPE

I chaired the IEEE 802.11 committee responsible for emerging wireless standards. This involves managing technical experts from global companies to jointly develop scalable and cost effective open base standards. As the former VP of the ATM Forum, I pioneered various ATM development efforts worldwide. For my global efforts in broadband networking, I was listed in the International Who's Who of Professionals. As a technopreneur and mentor I experienced the product development life cycles multiple times for MNCs in the networking equipment and the semiconductor industry.

Besides being a member of the review board of the International Journal of Cloud Applications and Computing, I was recently honoured as a Fellow for the prestigious NETAPPS2015 conference aimed at promoting greater engagement from Malaysian universities and internet researchers by encouraging technical participation in research and development. I hope more of such events will help spur the level of innovation and entrepreneurism in Malaysia.

## ENTREPRENEURSHIP AND INNOVATION

The first trait and key to successful entrepreneurship imbued to me from young, is the individual's vision in spotting opportunities where others

The second trait is confidence, passion, desire and preparation.

Innovation is a tool to increase productivity or to create a new product or positive changes to gain competitive advantage. "If innovation is the creation of new capacities for wealth creation, entrepreneurship is the exploitation of these capacities." (Delia Smith, Greenfield Ventures).

Being competitive, I enjoyed certain aspects of exit strategies i.e. an Initial Public Offering for a semiconductor firm which unexpectedly did not take off despite four years of involvement. It's a combination of success and failures although I believe failures as a result of calculated risks should be embraced positively. Everything from mobility in wireless communications to consumer relationships with technology is being disrupted. Predictive analytics, cloud computing, big data sciences and next generation wireless communications are key enablers for the next generation of entrepreneurs to capitalise

### Some facts about AeU

**AEU** is a multinational collaborative university supported by 34 countries. All its academic programmes are internationally benchmarked and approved by the Malaysian Ministry of Education. Today, AeU has an enrolment of more than 22,000 students from 65 countries and over 7,000 graduates. AeU also has a diverse international community of over 1,000 fellow doctoral students from 46 countries who are making a difference around the world.

Intakes of all postgraduate research programmes are open throughout the year. For enquiries, call 1300 300 238 or apply online now at www.aeu.edu.my

