

# The Pursuit of Education

*My story.*

Soo Yong (Grace) Lim 

## MY FORMATIVE YEARS

**G**rowing up in a developing nation, I always had a dream since I was young to study overseas one day. However, I lacked the opportunity, just as many others did. Hence I pursued my first degree at a local university in Malaysia: Multimedia University. Upon graduation, I was hoping to get a scholarship to pursue a master's degree overseas, and yet, despite receiving several offers from various U.K. universities, none of them came with a full scholarship. Undeterred, I opted to take a research office's offer from my alma mater after spending a few months in industry (Sony), where I realized afresh that my passion was really in academia. In 2005, I was selected as a participant to join the sixth China Synergy Program for Outstanding Youth, to tour around Hong Kong, Guangzhou, Xian, Beijing, and Shanghai for two weeks. That was an eye-opening trip for me as I interacted with so many outstanding young people from across the globe in enchanting ways. It also deepened my desire to really pursue a postgraduate degree beyond my home country. Upon returning from the trip, I started making actual preparations to do my Ph.D. studies in the United States. To do so, I took the relevant prerequisite exams, such as the Test of English as a Foreign Language and the Graduate Record Examinations,

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## EDITOR'S NOTE

Quality education is a critical factor that can shape an individual's thinking and transform the nations. Unfortunately, there is disparity in quality education which is recognized by United Nation's sustainable development goals as well where quality education to all is one of the goals. The quality of education has a huge difference across developed nations, developing nations, and underdeveloped nations. In this article, we would like to share the personal journey of Soo Yong (Grace) Lim in her pursuit of education.



Qammer Abbasi

and I scored reasonable results in both. In 2006, I was selected as an alternate for the East-West Center Graduate Degree Fellowship for the academic year 2006–2007. I was thrilled. Regrettably, despite staying optimistic about this slight opportunity to finally fulfill my childhood dream to study overseas, I had to accept the hard reality that there was no pull-out from the delegates; hence, I was not selected after all.

I did not give up. The East-West Center is located on the beautiful campus of the University of Hawaii at Manoa (UHM). I searched the UHM website and came across the then Hawaii Center for Advanced Communications (HCAC), now the Hawaii Advanced Wireless Technologies Institute, led by Prof. Magdy Iskander. I saw from the website that there were opportunities for graduate research assistantships, and I contacted Prof. Iskander about it. To my pleasant surprise and absolute delight, Prof. Magdy Iskander offered me a grad-

uate research assistantship! That was a defining moment in my life. I subsequently spent four years of my life from 2007 to 2010 pursuing a Ph.D. degree in electrical engineering on the beautiful island of Hawaii, advised by Prof. Magdy Iskander and Prof. Zhengqing Yun in the general field of antennas and propagation, with a specific focus on radio propagation modeling and measurement.

## MAKING A DECISION

I did my Ph.D. dissertation defense in 2010. On the evening of the day when I passed my defense, I remember jogging around the beautiful town of Manoa, feeling deep gratitude that I had passed perhaps the most important major examination in my life. **Figure 1** is a photo from my graduation. As I continued to jog in the cool night, the reality of graduation began to sink in. I realized I needed to plan for the next step post graduation and decide whether to stay in the United States, go back to

my home country, or move somewhere else. Usually, at this juncture, a person would normally send out bulk resumes to prospective employers. This is what I saw my friends and senior students do. What's more, Prof. Magdy Iskander very graciously allowed me to stay with HCAC for an extended time as I looked for a job in the United States. Nevertheless, as a Christian, my personal faith convinced me otherwise. I thought that what was most important to me was to seek the will of God and discern what God wanted me to do next, and where.

Thus, despite having prepared my resume, I did not send it to any university in the United States. I only sent my resume to a prospective employer I met at an IEEE Antennas and Propagation Society (AP-S) symposium for a possible industry position opening. During this period, I spent an increased amount of time reading the Bible and in quiet meditation. Of course, at the same time I was also actively completing the corrections on my dissertation and finishing all of the remaining work I had to do for graduation. After submitting my revised dissertation, I felt the Lord call me to go back to my home country, and, in obedience, I did.

### MY FIRST JOB

I left Hawaii on Christmas Day in the year I graduated, 2010, without having the next job in hand. Nevertheless, I was not particularly worried. Instead, I was really overjoyed about completing my studies abroad and going home with a Ph.D. degree. This was a childhood-dream-come-true moment for me, and everything felt magical—even the sun seemed to shine more brightly! It was indeed one of the happiest moments in my life. I sent my resume to six universities in Malaysia, among which was Sunway University, one of Malaysia's leading private universities, located in Petaling Jaya, Kuala Lumpur. To my delight, I was called for an interview in January 2011, followed by a job offer. I took it immediately, with great joy, and reported to work right away.

I had many fond, first-time moments at Sunway University, involving both

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teaching and research. Among others, there were moments such as my first time standing in front of a large class of university students and teaching them, setting final exam papers and grading them, and securing an internal research grant that led to securing an external research grant from the Ministry of Science, Technology and Information. I even won an award! I received the Award for Achievement in Research for Early Career Researchers in October 2012. This is a biennial award offered by the vice-chancellor to the most promising and talented researcher at the start of his/her career at Sunway University. This researcher is selected once every two years from the entire university. Winning this award gave me some tangible benefits. For one, the university very benevolently sponsored my trip to Maui, Hawaii, to attend the IEEE International Conference on Wireless Information Technology and Systems in November 2012 [1]. I was honored to be the session chair for Oral Session 401 on "Indoor and Urban Propagation," and beyond

that, I was thrilled to meet up again with my Ph.D. advisors and fellow labmates.

Amid the upward trajectory my career path seemed to be taking at Sunway University, in 2013 I felt a prompting in my spirit to make a move. I was part of the Department of Computer Science at that time as Sunway University did not then have an engineering school (they do now). Following the instinct of my heart and despite not seeing any job opening advertisement from them, I sent my resume to the University of Nottingham Malaysia, which is located approximately 50 km from Sunway University. I just thought that, in the long run, I still wanted to practice in the profession I was trained in; therefore, it made sense to chart my career path in that direction. Magically, the University of Nottingham Malaysia made me an offer to join as an assistant professor in their Department of Electrical and Electronic Engineering. I accepted it and reported to work on 2 January 2014.

### EMBRACING MY PROFESSION

As they say, finding a job you love is a major accomplishment in your career. I was very grateful and fortunate to have discovered early in my life that my passion was really in academia; hence, that's the path I have been



**FIGURE 1.** My graduation photo with Prof. Magdy Iskander in December 2010.

walking. That's why, when I moved from Sunway University to the University of Nottingham, workwise I felt very little difference as I was basically doing the same thing in terms of teaching and research. On one hand, I taught primarily in the areas of electromagnetics [2], and on the other hand, I conducted research about

radio propagation in complex environments [3], [4], [5]. But one good thing happened to me here that I did not expect: I met my husband here. We were colleagues in the same department and shared the same corridor. I did not anticipate this, but the many interactions we had from work led to a beautiful outcome. We married in

2016 and have three children together, two girls and one boy.

I have been with the University of Nottingham Malaysia for 11 years now, which is the longest time I have ever been with any institution (and this number is still increasing). Throughout my time here, I have given my utmost to my job. I would like to offer some advice to the young professionals contemplating a career in academia, which is, if you want to work in a university, both teaching and research are important. I have seen young lecturers heavily devoting their time to conducting research but spending much less time on the preparation or delivery of teaching. This, I think, is a pitfall. Of course, when it comes to academic promotion, one's publications and research input and output will be put on the table. Inevitably, this will be a huge driving force for academic staff: to want to conduct research and generate as much output as possible. Notwithstanding, at the end of the day, we have to ask ourselves: Why are we in this profession? One of the main answers, I think, should be that we want to educate the next generation. When we do our best to equip them with the fundamental knowledge and furnish them with the skills to use modern tools and software, they will go on to shape and engineer the world for a better tomorrow. Personally, in my career, I have won some awards for excellence in teaching. Notably among them is the 2018 IEEE AP-S Donald G. Dudley Jr. Undergraduate Teaching Award and the 2022 Lord Dearing Award, which celebrates excellent teaching and learning across the three campuses of the University of Nottingham—in the United Kingdom, China, and Malaysia.

Having emphasized the importance of teaching, let me now speak from the other side of my mouth to reiterate the significance of research. My advice to young professionals is that if you are to chart a career in academia, maintaining a lifelong passion for research is key. One may not stay forever in a particular field—in fact, one should explore new and emerging fields from



**FIGURE 2.** Hosting Prof. Zhengqing Yun (center) on a Fulbright–MCMC U.S. Specialist Grant to Malaysia in the summer of 2018. On the left is Dr. Ahmad Nasruddin 'Atiqullah Fakrullah from the MCMC.



**FIGURE 3.** At the funeral of my father-in-law.

within one's expertise—but it is definitely important to stay active and engaged in research throughout one's career. In that respect, I am forever grateful to my advisors Prof. Magdy Iskander and Prof. Zhengqing Yun for introducing me to the fascinating world of radio propagation. In the summer of 2018, I had the awesome privilege of hosting Prof. Zhengqing Yun on a Fulbright–Malaysian Communications and Multimedia Commission (MCMC) U.S. Specialist Grant to Malaysia (Figure 2), where we worked on investigating a pedestrian tunnel environment in the Kuala Lumpur City Centre over the summer [6]. In fact, ever since I left Hawaii after earning my Ph.D. degree in electrical engineering, I have gone beyond indoor stairwell and periodic building facades to examine other complex propagation environments, such as open-trench drains in Southeast Asia [7] and tropical natural caves in Malaysia [8], among others. All of these findings are expected to collectively contribute toward the accurate planning and implementation of wireless communications systems in complex environments. More recently, I have explored the use of machine learning and artificial intelligence to do propagation prediction, which contributes toward optimal base station planning and placement [9], [10]. These findings will be especially relevant for 5G and other future generations of cellular networks.

### POSTSCRIPT

Life is brief. When my father-in-law passed away peacefully on 2 March 2024, I felt that I had never come so close to death (Figure 3). We were all by his side, holding his hands. My father-in-law, the late Dr. Tiong Koon Lim, was a full professor at the University of Malaya—the oldest and highest ranking Malaysian institution of higher education. He devoted his life to chemistry and family. And I aspire to follow in his footsteps, in loving memory of him (Figure 4).



FIGURE 4. My family.

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