

Dr Winnie Tang Shuk-ming, JP

Honorary Fellow

Citation

Dr Winnie Tang Shuk-ming was raised by her grandmother in Yuen Long in the New Territories while her parents were busy earning a living. She attributes her success in life to the discipline and ethic of hard work ingrained in her by her life-long role model. Despite her illiteracy, her grandmother raised seven children single-handedly.

As a child, Dr Tang was not allowed to watch television or go out on weekends. Instead, she took up a hobby that she would eventually turn into a career: she liked looking at maps in the local library. In primary school, she began compiling a notebook encyclopedia about the topography, climate, language, and culture of different places in the world. At the age of 14, when Dr Tang first heard about computers, she quickly put them on her learning agenda as an alternative to manual map compilation. At that time a pre-assembled computer was too costly for her, so she built one herself with the help of a few tutorial books and her own pocket money savings.

Dr Tang holds a bachelor's degree in Geography and a PhD in Ecology and Architecture from The University of Hong Kong (HKU). It was during her undergraduate studies that she first encountered Geographic Information System (GIS). As one of 20 students who took a groundbreaking GIS class that year at HKU, she is the only classmate who pursued a career in the field. In her first job, she used GIS to create the first vegetation map of Hong Kong for the local chapter of the World Wildlife Fund and the Hong Kong SAR Government. Later, while studying for her PhD at HKU, she established Hong Kong's first ecological GIS database in collaboration with Department of Ecology and Biodiversity.

While she taught a course in GIS at HKU during her PhD studies, Dr Tang was an ambitious entrepreneur at heart. Aspiring to "solve the problems arising from paper maps by introducing the innovative technology to enhance Hong Kong's competitiveness through utilising geographic information for analysis", she invested all her savings in a GIS startup, at a time when the technology was still virtually unknown in Hong Kong.

Her audacity and perseverance eventually paid off. Today, Dr Winnie Tang Shuk-ming is known as a pioneer in the Information and Communications Technology (ICT) industry in East Asia, a trailblazer who introduced GIS to the public and private sectors in Hong Kong. Her spatial analytics company, Esri China (Hong Kong) Limited, is a market leader in GIS technology and mapping solutions in Hong Kong and Macau. In fact, Esri is considered one of the top software companies in the world.

Running Esri was tough at first. Dr Tang only got four hours of sleep most nights. But she never complained, remembering how cheerful her grandmother remained working day and night to take care of her children and grandchildren. She has lived up to her grandmother's example in all aspects of her life, not only in the boardroom but also in the gymnasium. She is an outstanding table tennis player.

Heeding her grandmother's advice to contribute to the society, Dr Tang has dedicated her professional knowledge and experience to serving the community through ICT, environmental and smart city advocacies, and support for start-ups. She has played a leading role in establishing various non-governmental organisations since 2005, including the eHealth Consortium; the Conservation E3 Foundation; the Smart City Consortium (SCC); and the Asia eHealth Information Network (AeHIN), to promote the deployment of technology in our daily lives.

She also displayed leadership in developing the "SARS Global Map" in 2003 and, more recently, the "Interactive Map Dashboard" for the COVID-19 pandemic in Hong Kong, both of which have received global acclaim. In 2015, her company Esri embarked on the "Map in Learning" programme in Asia, offering free GIS software to non-tertiary students. To date, over 1,000 teachers and students in more than 200 schools have joined the programme. Through Esri, she has instituted several scholarships to encourage more young people to embrace technology for the good of all Hong Kongers.

Currently an adjunct professor at HKU, Dr Tang has published 12 books and over 600 articles in newspapers and journals. Her Chinese-language book, *Surfing the IT World*, published in 2016, won a Publishing Award (in the Commerce and Management category) at the inaugural Hong Kong Publishing Biennial Awards in 2017.

These remarkable achievements have not gone unnoticed. In 2004, she was named a Young Achiever of the Year in the Women of Influence Award by The American Chamber of Commerce in Hong Kong. In 2006, she was recognised as one of the Ten Outstanding Young Persons in Hong Kong. In 2009, she was appointed a Justice of the Peace by the HKSAR government, and named a Distinguished Alumna by HKU Faculty of Science.

Dr Tang remains dedicated to doing more for the community. Indeed, the motto of her primary school, "Not to be served, but to serve", has echoed through her life. Not only will she continue sharing her knowledge with the society at large, she also plans to focus on nurturing talents in GIS and creating quality job opportunities for the younger generation.

Mr Chairman, because of her exemplary life, achievements in ICT and entrepreneurship, and devotion to the community, I am honoured to present Dr Winnie Tang Shuk-ming for the conferment of an honorary fellowship.

Citation written and delivered by Professor Padmore Amoah

鄧淑明博士

榮譽院士

贊辭

鄧淑明博士在元朗長大。小時候，由於鄧博士的父母忙於生計，照顧重任便交託在她的祖母身上。鄧博士事業有成，全賴祖母從小向她灌輸做人要「律己以嚴，勤奮盡責」。祖母雖然沒有受過教育，卻獨力把七個孫兒養育成人，同時各有成就。鄧博士視祖母為終身楷模。

小時候，家人不容許鄧博士看電視，也不准許她在周末外出玩耍，最終培養出成就她一生事業的嗜好，那便是到圖書館閱讀地圖。小學的時候，她開始以筆記本記錄世界各地的地形、氣候、語言和文化，筆記本就儼如她自學的專屬百科全書。14歲那年，鄧博士第一次聽聞有電腦這工具後，便決心要學習使用電腦，以代替人手繪製地圖。當時一台組裝電腦價值不菲，鄧博士就靠著幾本參考書和多年積蓄，自己動手組裝一台。

鄧博士在香港大學取得地理學學士學位和生態與建築哲學博士學位。她在修讀本科課程期間，才第一次接觸到地理資訊系統（GIS）。當年香港大學首次開辦GIS課程，修讀的有20人，當中至今從事GIS工作的就只有她一位。鄧博士在第一份工作中便運用GIS學以致用，為世界自然基金會香港分會及香港特別行政區政府創建了首張植被地圖。其後，她在香港大學攻讀哲學博士，與生態學及生物多樣性學系共同建立了香港第一個生態GIS數據庫。

修讀博士學位時，鄧博士一方面潛心教學，在香港大學主講地理資訊系統，另一方面則滿懷熱忱，投入實踐創業計劃。當時GIS在香港還未廣為人知，她卻耗盡積蓄來創業，目的純粹為「引入創新技術，解決紙本地圖的問題，並透過地理資訊進行分析，提升香港競爭力」。

鄧博士的勇氣與堅毅最終沒有白費。她率先將GIS引入香港公私營機構，為亞洲的資訊及通訊科技界人所共知。鄧博士創辦的Esri中國（香港）有限公司，是香港和澳門GIS技術和地圖解決方案之先驅，亦是全球領先的軟件公司之一。

公司剛成立時的日子頗為艱難，鄧博士每天多數只能睡四小時。可是，想到祖母日夜照顧兒孫，心情都依然開朗，她就絲毫沒有抱怨。祖母勤奮樂觀，鄧博士更青出於藍，工作上如此，運動方面亦然：鄧博士是一名乒乓球健將。

鄧博士對祖母着她貢獻社會的教誨一直銘記於心，致力運用其專業知識和經驗服務社會，範疇包括資訊及通訊科技、倡導環保和智慧城市，以及支援初創企業。自2005年起，鄧博士牽頭成立多個非政府組織，包括電子健康聯盟、環護教育基金會、智慧城市聯盟及亞洲電子健康信息網絡等，以推廣科技在日常生活的應用。

鄧博士於2003年開發了「沙士電子地圖」，而最近亦就香港新型冠狀病毒疫情開發了「互動地圖儀表板」，這兩項計劃在世界各地均廣受讚譽。她的公司於2015年開展了「Map in Learning」計劃，讓全港中小學免費享用GIS軟件，至今已有200多所學校超過1,000名師生參加。此外，她以公司的名義成立了多項獎學金計劃，以鼓勵更多年輕人利用科技為香港人謀福祉。

鄧博士目前是香港大學客席教授，出版了12本著作，於報章和學術期刊發表的文章超過600篇。她於2016年出版《浪遊IT世界》，翌年榮獲首屆香港出版雙年獎的出版獎(商業及管理類)。

鄧博士成就非凡，有目共睹。她在2004年獲選為香港美國商會「最具影響力女性獎 — 年度傑出女青」，2006年獲選為香港十大傑出青年，2009年獲香港特別行政區政府委任為太平紳士，同年獲香港大學理學院選為傑出校友。

鄧博士一直致力服務社會，將其小學校訓「非以役人，乃役於人」時刻身體力行。她不僅持續向社會大眾傳授自己的學問，亦專注重點培育GIS人才，為年輕人創造優質的工作機會。

主席先生，鄧博士一生堪稱典範，在通訊科技界和企業界建樹良多，又熱心服務社會，本人謹恭請閣下頒授榮譽院士銜予鄧淑明博士，以表揚其貢獻。

贊辭由柏墨教授撰寫及宣讀