

Dr Mahesh Nagarajan

Doctor of Business Administration *honoris causa*

Citation

Dr Mahesh Nagarajan was born into a modest family in Madras (now Chennai) in India. His father, an accountant, and his mother, a writer, made sacrifices and difficult choices so that he and his brother would have the best life possible. This foundation, combined with his “love” for mathematics, has enabled Dr Nagarajan to become one of the top scientists in the world in the field of operations management and operations research, which uses mathematics to “improve the world around us”.

Even in childhood, Dr Nagarajan knew he wanted to study science or mathematics. However, unaware of his squeamishness to the sight of blood, his first day in a biology lab ended abruptly when he “fainted at the sight of a dissected rat”. The experience led him to the study of computer science.

Dr Nagarajan obtained his undergraduate degree from the Indian Institute of Technology, Bombay in 1995. He obtained his MA in Applied Mathematics and a PhD in Operations Management from the University of Southern California in Los Angeles, US in 2003. These years of study were replete with memorable achievements, which include winning a place as a finalist in the math Olympiad, which shaped his graduate studies and career as an applied mathematician.

After completing his PhD, he joined the Sauder School of Business at the University of British Columbia, Canada, in the same year. He holds the alumni chair of Stochastic Optimization and is the Senior Associate Dean for Research at the Sauder School of Business. He has been a Distinguished Scholar of the Faculty of Business at Lingnan University since 2019 and is currently a Research Fellow at the Shanghai University of Finance and Economics.

His research interests include applications of optimisation, mathematical modelling in cooperative game theory, stochastic inventory theory, healthcare operations, cooperative game theory, and queueing and approximation algorithms. His research has produced several academic and practical outputs. He has published over 35 peer-reviewed articles in top-ranking journals such as *Management Science*, *Mathematics of Operations Research*, and *Production and Operations Management*, among others.

His sterling career has earned him several recognitions in the form of reputable awards. Dr Nagarajan was awarded The Institute for Operations Research and the Management Sciences (INFORMS) Optimization Society Young Researcher Prize in 2008. He also received the Administrative Sciences Association of Canada’s Past President Research Award in 2008. In 2009, he was nominated for the National Sciences and Engineering Research Council of Canada’s Discovery Accelerator Supplement. The same year, he received a Skinner Early Career Research Award from the Production and Operations Management Society. In 2020, he won the Daniel H. Wagner Prize for Excellence in the Practice of Advanced Analytics and Operations Research by INFORMS. He has received awards for research excellence in both senior and junior categories from the University of British Columbia.

Dr Nagarajan's service to the academic community also deserves mention. He is currently the Department Editor of *Manufacturing and Service Operations Management and Operations Research Letters*. He also serves as Senior Editor for *Management Science, Operations Research, Production and Operations Management*, and *Naval Research Logistics*. In 2021, he was a judging committee member for the Manufacturing Services and Operations Management Special Interest Group Best Paper Award in INFORMS. Since 2023, he has served on the search committee for the Editor-in-Chief of *Operations Research*. Despite his numerous teaching commitments, he has also been teaching for the University of British Columbia International MBA programme at Shanghai Jiao Tong University.

His contribution to science and a safer world was probably most "meaningful" during the COVID-19 pandemic, where he "worked closely with parts of public health and hospitals in crafting a response using models". He supported the Canadian Government in developing a responsive supply chain for COVID-19 vaccines, making decisions on re-opening cities, "when to close hospitals", "forecasting and managing loads in acute settings in hospitals", and how to help people dealing with addiction. Indeed, he was recognised as one of the world's most active researchers in the control of the COVID-19 pandemic. These achievements have not only been noted in academic and government circles; they have been acknowledged by the public at large. His contribution earned him popularity among sections of the Canadian public who recognise him as the "man from the television... (who) used math to help us with COVID-19...". He attributes his success to the sacrifices of his parents and the support of his family, who taught him the value of prioritising.

Despite his numerous outstanding achievements, Dr Nagarajan does not rest on his laurels. He plans to continue to support societal development by applying his research to other social needs. In his view, some major crises that emanate from climate change will loom large and persist. To prepare for these crises, "we need global models for better and sustainable health that can be delivered cheaply", Dr Nagarajan contends. The solution to these issues keeps Dr Nagarajan up at night. Hence, he wants to continue providing mentorship where he can, advise young scholars, and find ways to disseminate some of his most useful applied work, especially in health service settings, to improve human life. His motivation to do more for society stems from principles such as "respect for people, psychological honesty and openness" and the need "to realise what one values most and then craft your life trying to do the things you value".

Mr Chairman, in recognition of his outstanding professional achievements and distinguished public service, it is my honour to present Dr Mahesh Nagarajan for conferment of Doctor of Business Administration *honoris causa*.

Citation written and delivered by Professor Padmore Adusei Amoah

Dr Mahesh Nagarajan

榮譽工商管理學博士

贊辭

Mahesh Nagarajan博士出生於印度馬德拉斯(現名為清奈)的一個普通家庭。他的父親是會計師，母親是作家，他們為了讓兩個兒子盡可能過上最好的生活，作出了犧牲和艱難的選擇。有了良好的基礎，加上他對數學的「熱愛」，Nagarajan博士現已成為運營管理和運籌學研究領域的世界頂尖科學家之一，運營管理和運籌學主要是利用數學來「改善我們的世界」。

在童年時期，Nagarajan博士就知道自己的興趣在於科學或數學。然而，由於不知道自己對血液的恐懼，他在生物實驗室的第一天學習就因為「看到被解剖的老鼠而暈倒」被逼即時終止。他因此決定學習電腦科學。

Nagarajan博士於1995年獲得孟買印度理工學院本科學位。2003年，他在美國洛杉磯南加州大學獲得應用數學碩士學位和運營管理博士學位。在這段學習期間，他取得了多項顯著的成就，其中包括在數學奧林匹克競賽中獲得總決賽資格，這對他在研究生階段選修的範疇和後來以應用數學家為事業的決定亦有一定的影響。

他取得博士學位那年加入加拿大英屬哥倫比亞大學尚德商學院，擔任隨機優化校友講座教授，同時也是尚德商學院的高級研究副院長。自2019年以來，他一直是嶺南大學商學院的傑出學者，目前也是上海財經大學的研究學者。

他的研究興趣包括最優化應用、合作博弈論中的數學建模、隨機庫存理論、醫療運營、合作博弈論和排隊與近似演算法。他的研究帶來了多項學術上和實際應用方面的成果。他在《管理科學》、《運籌學數學》、《生產與運營管理》等頂級期刊上發表了超過35篇經同儕評審的文章。

Nagarajan博士傑出的成就為他贏得了多個聲譽卓著的獎項。2008年，他榮獲運籌學及管理科學學會(INFORMS)優化學會青年研究員獎，以及加拿大行政科學協會前任主席研究獎。2009年，他獲提名接受加拿大國家科學與工程研究局提供的額外研究資助。同年，他獲得生產與運營管理協會頒發的Skinner青年研究學者獎。2020年，他獲INFORMS頒發的Daniel H. Wagner進階分析和運籌學卓越實踐獎。他亦曾獲得英屬哥倫比亞大學高級和初級組別的卓越研究獎。

Nagarajan博士對學術界的貢獻有目共睹。他目前是《製造與服務運營管理》及《運籌學快報》刊物的編輯，並擔任《管理科學》、《運籌學》、《生產與運營管理》和《海軍研究後勤學》的高級編輯。2021年，他擔任INFORMS製造服務與運營管理特別興趣小組最佳論文獎評審委員會成員。自2023年以來，他擔任《運籌學》主編遴選委員會成員。儘管教學工作繁多，他還抽空為英屬哥倫比亞大學在上海交通大學開辦的國際工商管理碩士課程授課。

在新冠疫情肆虐期間，他「與公共衛生部門和醫院密切合作，利用模型制定應對措施」，這大概是他對科學以及更為安全的世界最「有意義」的貢獻。他支援加拿大政府為新冠疫苗開發反應迅速的供應鏈，並協助政府就重新開放城市、「何時關閉醫院」、「預測和管理醫院負荷嚴重的情況」，以及如何協助上癮的人士作出決策。事實上，他被公認為是世界上最積極參與控制新冠疫情的研究人員之一。這些成就不僅受到學術界和政府的關注，也得到了廣大公眾的認可。他的貢獻提升了他在加拿大部分群眾的知名度，他們讚揚Nagarajan博士是「從電視走出來的人... (他) 用數學幫助我們應對新冠疫情...」。Nagarajan博士將自己的成就歸功於父母所作的犧牲和家人給予的支持，家人讓他明白分清事情輕重緩急的道理。

儘管取得了眾多傑出成就，Nagarajan博士並沒有安於現狀。他希望自己的研究能夠配合社會的需要，繼續支援社會發展。他認為氣候變化帶來的一些重大危機將會持續發酵。為了應對這些危機，Nagarajan博士認為「我們需要價廉的可促進持續健康的全球模型」，他經常為找尋這些解決方案而不眠不休。因此，他希望繼續提供力所能及的指導，為年輕學者提供建議，並設法分享他的一些最有效的應用研究工作，特別是在健康服務領域，以改善人類生活。他貢獻社會的動力源自「尊重他人，坦誠開放」等原則，認為一個人需要「意識到自己最珍視的是甚麼，然後竭盡所能去做自己珍視的事情」。

主席先生，為表彰 Mahesh Nagarajan博士傑出的專業成就和卓越的公共服務，本人謹恭請 閣下頒授榮譽工商管理學博士學位予Mahesh Nagarajan博士。

贊辭由 Padmore Adusei Amoah 教授撰寫並宣讀