Professor Pradeep K. KHOSLA

Citation

Professor Pradeep K. KHOSLA is a pioneering engineer, distinguished educator, and visionary leader whose career is marked by groundbreaking research, transformative academic leadership, and a steadfast commitment to societal advancement. As the Chancellor of the University of California (UC) San Diego, Prof. Khosla has elevated the institution to rank among the world's top 20 research universities, fostering innovation and interdisciplinary collaboration to address the most pressing global challenges.

Born in India, Prof. Khosla's academic journey began with a bachelor's degree in technology from the Indian Institute of Technology Kharagpur, after which he pursued graduate studies in electrical and computer engineering at Carnegie Mellon University (CMU), earning his Master of Science and PhD in 1984 and 1986, respectively.

CMU was the cradle of Prof. Khosla's distinguished academic career, counting key roles such as Founding Director of the CMU CyLab, Head of the Department of Electrical and Computer Engineering, and Dean of the College of Engineering. His contributions to robotics, modular and reconfigurable robotic systems, and secure embedded systems have shaped the fields of engineering, artificial intelligence (AI), and cybersecurity. These are all fields of strategic importance and intensive development at HKUST, highlighting a shared commitment to advancing the frontiers of technology.

Prof. Khosla's leadership philosophy is rooted in interdisciplinary collaboration and problem-solving. He has demonstrated keen ability to anticipate future technological needs, as evidenced by his early work on modular robotic systems and secure embedded software, which laid the foundation for advancements in AI and autonomous systems. By consistently prioritizing educational access and institutional growth, he has markedly expanded student access to transformative learning experiences.

At the helm of UC San Diego for more than 13 years, Prof. Khosla is hailed as a visionary leader who has shepherded the University to unprecedented heights. He initiated the first-ever Strategic Plan to define the university's vision and goals, emphasizing innovation, collaboration, and societal impact. He spearheaded the US$2 billion Campaign for UC San Diego, surpassing its original fundraising goal by amassing US$3.05 billion, and oversaw US$12 billion in capital improvements to expand research facilities, classrooms, and student housing. These accomplishments testify to his foresight that has led academic institutions to the forefront of the global research and education arenas.

Prof. Khosla ardently advocates for dismantling traditional academic silos to address complex societal problems. He envisions a future where AI not only enriches academic research but also serves as a tool for solving real-world challenges in areas from sustainability to health care. This vision

aligns with the ongoing efforts of The Hong Kong University of Science and Technology (HKUST) to leverage AI for improving human wellbeing.

Prof. Khosla's global perspective is informed by his extensive experience with interdisciplinary teams and government agencies. This includes his tenure at the US government's Defense Advanced Research Projects Agency between 1994 and 1996, where he advanced robotics for defense applications and initiated programs to address pressing national security needs. His vast experience across higher education sector and government has empowered him to bridge academia, industry, and government, fostering transformative cross-sectoral collaboration. This ability to navigate and connect different sectors is a quality that HKUST highly values as it seeks to strengthen its global partnership and impact.

Prof. Khosla's distinct leadership and academic achievements have earned him widespread recognition. He is a member of the American Academy of Arts and Sciences, the National Academy of Engineering, and the Indian National Academy of Engineering, among others. He is also a Fellow at numerous prestigious institutions, including the Institute of Electrical and Electronics Engineers (IEEE), the American Society of Mechanical Engineers (ASME), the American Association for Advancement of Science, and the American Association of Artificial Intelligence. His accolades include the IEEE W. Wallace McDowell Award, the Light of India Award, and ASME's Lifetime Achievement Award.

Prof. Khosla's legacy shall not simply be limited to these honors, but the enduring impact of his work on individuals, institutions, and the broader fields of engineering and education. His vision aligns with HKUST's mission to foster interdisciplinary education and address complex global challenges through technological innovation. At the Global University Presidents and Leaders Summit in 2024, Prof. Khosla participated in a session led by HKUST President Prof. Nancy IP, where the two eminent scholars acknowledged the importance of the globalization of knowledge for the advancement of humanity. This dialogue between our institutions highlighted the powerful synergies that can be forged when like-minded universities collaborate.

Prof. Khosla's experience in leading top-tier research university UC San Diego, coupled with his expertise in building interdisciplinary programs, makes him an invaluable partner in HKUST's pursuit of excellence. His leadership, foresight, and commitment to harnessing technology for societal good are exceptional qualities highly admired by educators. As HKUST advances its ambition in medical innovation, Prof. Khosla's insights and expertise will undoubtedly prove instrumental to the University's growth.

Pro-Chancellor, on behalf of the Council of The Hong Kong University of Science and Technology, I have the high honor of presenting to you, Prof. Pradeep K. Khosla, Chancellor of the University of California San Diego, for the award of Doctor of Engineering *honoris causa*.

普拉德普・科斯拉教授

讚辭

普拉德普・科斯拉教授是一位勇於創新的工程師、出類拔萃的教育家及高瞻遠矚的領袖。他不僅在科研領域屢創突破，更憑藉其出色的領導才能為學術界帶來深遠改變，致力促進社會發展。作為加州大學聖地牙哥分校校長，科斯拉教授成功帶領大學躋身全球20強研究型大學之列，積極推動創新及跨學科合作，以應對全球最迫切的重大挑戰。

科斯拉教授生於印度，在印度理工學院卡哈拉格普爾校區取得科技學士學位，其後赴美深造，在卡耐基梅隆大學修讀電子及計算機工程，並於1984年及1986年分別獲取科學碩士及博士學位，展開其卓爾不凡的學術旅程。

從求學到治學，卡耐基梅隆大學可謂孕育科斯拉教授學術成就的搖籃。他曾出任多項大學要職，包括CyLab實驗室創始主任、電子及計算機工程學系系主任及工程學院院長等。他在機器人技術、可重組的模組機器人系統、安全嵌入式系統等範疇，貢獻卓著，塑造了工程、人工智能及網絡安全領域的發展格局。這些均是科大策略性重點發展的領域，彰顯雙方對推動科技前沿的共同承諾。

科斯拉教授的領導理念植根於跨學科合作及解難精神，並對未來科技趨勢抱持獨到見解，洞察未來所需。其早期研究聚焦於模組機器人系統及安全嵌入式系統，為人工智能及自主系統的發展奠定基礎。他向來重視為學生提供教育機會與促進大學發展，讓許多學生得以接受嶄新的學習體驗，惠澤莘莘學子。

科斯拉教授執掌加州大學聖地牙哥分校逾13年，任內帶領大學攀登至前所未有的高峰，其卓越的領導能力備受讚譽。他主導制定該校首個《策略發展計劃》，為大學的長遠發展訂立清晰願景和目標，強調創新、協作及造福社群。在其領導下，大學成功開展目標總額達20億美元的大學籌款活動，最終籌得共30.5億美元，遠超原定目標。同時，他亦統籌達120億美元的校園擴建工程，以擴展研究設備、教室及學生宿舍。此等成果充分反映科斯拉教授的遠見卓識，及其推動學府走在全球科研及教育尖端的領導力。

科斯拉教授積極打破傳統學術藩籬，提倡以跨學科合作應對複雜的社會挑戰。承其未來願景，人工智能將可深化學術研究，並且解決可持續發展以至醫療健康等現實社會問題。此願景與香港科技大學（科大）的理念同出一轍，期望以人工智能提升人類福祉。

科斯拉教授的全球視野源於他在跨學科團隊及政府機構的深厚歷練。1994至1996年間，他曾任職

美國國防高級研究計劃局，推動機器人技術於國防領域的應用，並開展多項應對國家安全挑戰的重要計劃。過去在高等教育界及政府機關累積的豐富經驗，讓他能夠擔當學術界、業界與政府之間的橋樑，促進跨界協作的創新變革。這種駕馭並連結不同界別的能力，正是科大在拓展全球夥伴關係及提升影響力過程中所珍視的特質。

科斯拉教授的傑出領導及學術成就備受國際認同，他先後獲美國藝術與科學學院、美國國家工程學院及印度國家工程學院頒授院士榮銜。同時，他於許多知名學術機構擔任院士，包括電機電子工程師學會（IEEE）、美國機械工程師學會（ASME）、美國科學促進會及美國人工智能協會等。他曾獲頒IEEE麥克道爾獎、Light of India Award及ASME終身成就獎等殊榮。

科斯拉教授成就斐然，但其個人價值遠非獎項數量所能衡量，而在於他對社會個體、機構以至工程及教育領域所產生的深遠影響。此理念與科大秉持的使命不謀而合，科大一直竭力推展跨學科教育，利用科技創新應對全球挑戰。於「大學校長高峰論壇2024」期間，科斯拉教授參與由科大校長葉玉如教授主持的專題討論，兩位傑出學者聚首一堂，深入探討知識全球化對推動人類永續發展的重要性，充分展現了雙方在理念上的共鳴與契合。兩校之間的這次對話，充分展現了志同道合的大學如何攜手開創新局，為未來譜寫合作共贏的新章。

科斯拉教授不僅具備領導加州大學聖地牙哥分校的豐富經驗，更在跨學科課程設計上見解獨到，這使他成為科大追求學術卓越的重要合作夥伴。他的領導能力、前瞻視野及善用科技為社會謀福祉的堅定信念，深受教育界敬仰。隨着科大積極推動醫療創新，科斯拉教授的睿智洞見與專業知識，無疑將為科大的未來發展注入重要力量。

大學副監督，本人謹代表香港科技大學校董會，恭請閣下頒授工程學榮譽博士予加州大學聖地牙哥分校校長普拉德普・科斯拉教授。