

PROFILE

Vice President, Hybrid Cloud IBM Research

CITATION

For his vision, execution and establishment of an industry ecosystem to advance disruptive nanotechnology, benefiting IBM clients with mission critical workloads; and for his instrumental role in creating the world's first multi-billion dollar public-academic and industry partnership to improve the compute efficiency of hardware essential for Artificial Intelligence (AI), with the goal of achieving a significant reduction in energy consumption



MUKESH KHARE

Asian American Executive of the Year

Dr. Mukesh V. Khare is Vice President at IBM Research, driving IBM's computing hardware research agenda. In his current role, he and his team of more than 1000 researchers worldwide are redefining the future of computing for next generation workloads such as AI, Machine Learning, High-Performance Computing and their collective delivery through the Hybrid Cloud.

Throughout his career, Dr. Khare has helped build and drive collaborative research alliances in the nanotechnology industry to push the state of the art for the systems required to manage today's client smartphone and datacenter mission-critical workloads and chip technologies. He has helped grow the world's most advanced nanotechnology research complex in Albany, NY, with more than \$20B of investment and hundreds of partner companies collaborating for commercial and societal benefits. As a result of these innovations, IBM delivered to the U.S. National Labs the world's most powerful supercomputers (World's #1 and #2), which also served to put the United States back at the top of the world's supercomputing map.

Most recently, Dr. Khare championed the formation of an AI Hardware Center to drive innovations in AI technologies through collaborations with New York State, The State University of New York, Rensselaer Polytechnic University and several leading industrial partners. Collectively, IBM and NYS have committed more than \$2.3B of investment over next five years toward the world's first such initiative of its kind. The AI Hardware center is targeting to improve compute efficiency by more than 10000 time over a decade to sustain energy consumption demands from AI workloads.

Dr. Khare is a recipient of the prestigious IBM Corporate Award, IBM's highest technical award, for his leadership in delivering innovative technologies. He is Chairman of the Board of Directors for the Semiconductor Research Corporation (SRC), which manages over \$100M per year to fund university research in the field of nanotechnology and to inspire and motivate more than 1000 students to pursue academic studies in high-demand fields. He also serves on public and industrial advisory boards to drive collaborative innovation agendas for the benefit of both academia and society.

Dr. Khare served as the General Chair of the 2018 Symposia on VLSI Technology, the Chip Industry's premier conference, and has co-authored more than 100 research papers over last two decades. He holds more than 25 U.S. and international patents for his inventions in the field of nanotechnology.

Dr. Khare began his career at IBM in 1998, after finishing his M.S., M. Phil. and Ph.D. degrees from Yale University and M.Tech. from IIT Bombay. A proud father of two and the husband of an architect, Dr. Khare is a strong advocate for diversity and equal opportunity in the workplace through sponsorship of initiatives such as PowerUp for women engineers.