ANIMA ANADKUMAR

Anima Anandkumar has done seminal work in artificial intelligence impacting a broad range of scientific domains. She invented Neural Operators, a deep learning framework for scientific modeling such as solving partial differential equations (PDE). She developed the first AI-based high-resolution weather model, tens of thousands of times faster than current forecasting systems, that is running at weather agencies, and widely adopted by both academia and industry. Her AI algorithms have enabled many other scientific advances such as designing a novel medical device, inventing an anti-cancer drug currently in clinical trials, and safer autonomous drone flights.

Anima is currently a Bren professor at Caltech and a fellow of the IEEE, ACM, and AAAI. She has received several awards, including the IEEE Kiyo Tomiyasu Award, the Schmidt Sciences AI2050 senior fellow, awards from the Guggenheim, Alfred P. Sloan and Blavatnik Foundations, the NSF Career Award, the Distinguished Alumnus Award by the Indian Institute of Technology Madras, and best paper awards at venues such as Neural Information Processing and the ACM Gordon Bell Special Prize for HPC-Based COVID-19 Research. She recently presented her work on AI and science to the White House Science Council (PCAST), the National AI Advisory Committee, and at TED 2024.

Anima received her B. Tech from the Indian Institute of Technology Madras and her Ph.D. from Cornell University and did her postdoctoral research at MIT. She was previously principal scientist at Amazon Web Services and senior director of AI research at NVIDIA.