

Dr. Madhav Marathe



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Biography

Madhav Marathe is Distinguished Professor in Biocomplexity, Director of the Network Systems Science and Advanced Computing (NSSAC) Division, Biocomplexity Institute and a Professor of Computer Science at the University of Virginia. His prior positions include Director of the Network Dynamics and Simulation Science Laboratory within the Biocomplexity Institute of Virginia Tech and a team leader of research and computing in the Basic and Applied Simulation Science group, Computer and Computational Sciences Division at the Los Alamos National Laboratory. He is a Fellow of the American Association for the Advancement of Science (AAAS), Society for Industrial and Applied Mathematics (SIAM), Association for Computing Machinery (ACM) and Institute of Electrical and Electronics Engineers (IEEE). He is an elected member of the Virginia Academy of Science, Engineering and Medicine.

Marathe and his division focus on developing the scientific foundations and the associated engineering principles to study large, multi-scale complex biological, information, social, and technical networks. During his 30 year professional career, he has established and led a number to transdisciplinary team science groups. During this period, he and his colleagues have developed scalable computational methods to study the social, economic, and health impacts of large-scale natural and human-initiated disasters. Those tools and methods have been used in more than 50 case studies to inform and assess various policy questions pertaining to planning and response in the event of such disasters. Recently, his group has supported international, federal, state and local authorities in their COVID-19 pandemic response efforts.

Education

Postdoctoral Fellow, CIC-3 Group, Los Alamos National Laboratory

Ph.D. in Computer Science, University at Albany, SUNY

B. Tech in Computer Science and Engineering, Indian Institute of Technology Madras