

BIO: Dr. Shashi Phoha

Dr. Phoha's research interests are in computational sciences that enable dependable distributed automation of multiple interacting devices over ad hoc and long haul networks. She has forged new research directions in computational sciences that enable dependable distributed automation of multiple interacting devices. She has developed real-time data driven sensor fusion and self-organization algorithms for secure wireless sensor networks for target tracking and for autonomous ocean sampling robotic networks. She has held senior technical and management positions in academia, government, and industry. For two years, she was the Director of a premier national laboratory, the Information Technology Laboratory (ITL) of the National Institute of Standards and Technology (NIST), which conducts research in Computational Sciences, Computer Security, Software, Advanced Networking, Information Access, and Mathematical and Statistical Engineering. Since 1991, she has held the dual titles of Professor of Electrical Engineering at the Pennsylvania State University and the Director of the Division of Information Sciences and Technology at its Applied Research Laboratory. Prior to that, she was the Director of C4I and Systems Analysis Division of the Computer Sciences Corporation where she led the development of the Global Transportation Network for DoD. .

She was awarded the 2004 Technical Achievement Award by the IEEE Computer Society. She has authored over 200 research papers, three books, and holds three patents. She has held leadership positions in many national and international organizations and given over two dozen invited keynote addresses at conferences and symposia. She was the Guest Editor of Special Issues of IEEE Transactions (TMC) on Mission-oriented Sensor Networks, an associate editor of the IEEE Transactions on Systems, Man, and Cybernetics for five years and is editor of the International Journal of Distributed Sensor Networks. She received her M.S. in Operations Research from Cornell University (1973) and Ph.D. from Michigan State University (1976).

List of Publications