

Institute for Human and Machine Cognition

The Institute for Human and Machine Cognition is a not-for-profit research institute of the State University System of Florida and is affiliated with several Florida universities. Researchers at the Institute pioneer technologies aimed at leveraging and extending human capabilities. The Institute's human-centered approach often results in systems that can be regarded as cognitive or perceptual prostheses, much as eyeglasses are a sort of ocular prosthesis. These systems fit the human and machine components together in ways that exploit their respective strengths and mitigate their respective weaknesses. The design and fit of computational prostheses require a broader interdisciplinary range than is typically found in one organization; thus the Institute's staff includes computer scientists, cognitive psychologists, neuroscientists, physicians, philosophers, engineers, and social scientists. The Institute has a physical presence in Pensacola and in Ocala.

Current active research areas include knowledge modeling and sharing, adjustable autonomy, robotics, advanced interfaces and displays, communication and collaboration, computer-mediated learning systems, intelligent data understanding, software agents, expertise studies, work practice simulation, knowledge representation, and other related areas.

Institute faculty and staff collaborate extensively with industry and government to develop science and technology that can be enabling with respect to society's broader goals. Institute researchers receive funding (current funding exceeds \$25,000,000) from a wide range of government and private sources. Institute research partners have included the National Science Foundation; the National Aeronautics and Space Administration; the Army, Navy, and Air Force; the National Institutes of Health; the Department of Transportation; and companies such as Nokia, Sun Microsystems, Microsoft, Boeing, and Lockheed.

Dr. Ken Ford, the Institute's founder and CEO, is the author or coauthor of hundreds of scientific papers and six books. He received a Ph.D. in Computer Science from Tulane University. He is Emeritus Editor-in-Chief of AAI/MIT Press and has been involved in the editing of several journals. Dr. Ford is a Fellow of the Association for the Advancement of Artificial Intelligence (AAAI), a member of the American Association for the Advancement of Science, a member of the Association for Computing Machinery (ACM), a member of the IEEE Computer Society, and a member of the National Association of Scholars. Dr. Ford has received many awards and honors including the Doctor Honoris Causas from the University of Bordeaux in 2005 and the 2008 Robert S. Englemore Memorial Award for his work in artificial intelligence.