Russell H. Taylor

Russell H. Taylor received his Ph.D. in Computer Science from Stanford in 1976. He joined IBM Research in 1976, where he developed the AML robot language and managed the Automation Technology Department and (later) the Computer-Assisted Surgery Group before moving in 1995 to Johns Hopkins, where he is a the John C. Malone Professor of Computer Science with joint appointments in Mechanical Engineering, Radiology, and Surgery and is also Director of the Engineering Research Center for Computer-Integrated Surgical Systems and Technology (CISST ERC). He is the author of over 250 peer-reviewed publications, a Fellow of the IEEE, of the AIMBE, of the MICCAI Society, and of the Engineering School of the University of Tokyo. He is also a recipient of numerous awards, including the IEEE Robotics Pioneer Award, the MICCAI Society Enduring Impact Award, and the Maurice Müller Award for Excellence in Computer-Assisted Orthopaedic Surgery.

Talk : Medical Robotics and Computer-Integrated Interventional Medicine

This talk will discuss ongoing research at the JHU Engineering Research Center for Computer-Integrated Surgical Systems and Technology (CISST ERC) to develop systems that combine innovative algorithms, robotic devices, imaging systems, sensors, and human-machine interfaces to work cooperatively with surgeons in the planning and execution of surgery and other interventional procedures. This talk will describe past and emerging research themes and illustrate them with examples drawn from our current research activities in medical robotics and computer-integrated interventional systems.