**ExperTwin: An Alter Ego in Cyberspace for Knowledge Workers**

**Abstract.** A very common scenario for professionals in all domains is the almost impossible task of trying to remain current with the latest advances in their respective fields. An AI assistant that could search, filter, analyze, and present contextually relevant knowledge known as ExperTwin will be discussed in this talk. Think of ExperTwin as your alter-ego, an AI based system that will search through pre-defined sources and present us with information that is the most relevant to our needs without the need for us to search for it ourselves. Since ExperTwin is “on the job” 24 hours a day, you are unlikely to miss any relevant information. This system is based on the idea that just as “Mechanical Advantage” revolutionized he productivity of industrial workers, we believe exploitation of “Knowledge Advantage” will similarly contribute to the productivity of knowledge workers.

**Biography.** Dr. Y. V. Ramana Reddy is a Professor of Computer Science and Director of the Concurrent Engineering Research Center at West Virginia University. He has worked on a number of research areas with the central theme of enabling technologies for improvement of collaborative processes involving widely distributed teams. The areas of research include Artificial Intelligence, Knowledge Based Simulation, Concurrent Engineering, Medical Informatics, Telemedicine, Distance Learning, and Intelligent Decision Support. Professor Reddy’s research was funded by both Government and Industry. The sponsors include, Defense Advanced Research projects Agency (DARPA), Strategic Defense Initiative (SDI), National Institutes of Health (NIH), national Institute for Occupational Safety and Health (NIOSH), General Electric, Bell Atlantic, Bellcore, DEC, HP, Hitachi and many other organizations. From 1985 to 2005 Professor Reddy directed externally supported research totaling more than US$50 Million. Professor Reddy’s research resulted in more than 50 publications. He was a keynote/plenary speaker at numerous national and international conferences in UK, France, Germany, Belgium, Netherlands, Russia, Japan, Thailand, Australia and India. Professor Reddy pioneered several key concepts. These include Knowledge Based Simulation (KBS), Knowledge Representation using C, Concurrent Engineering, and the use of the Web Browser for distributed multimedia patient records (prior to the creation of Netscape). The last area was featured on the ABC World News with Peter Jennings, Wall Street Journal and many newspapers around the world including Le Monde in Paris. Professor Reddy's work on Knowledge Representation (Laser) was the basis for formation of a new company, Bell Atlantic Knowledge Systems (BAKS) in 1987. He served as the Chief Scientist for BAKS until it merged with Bell Atlantic Software Systems (BASS). Professor Reddy now directs the Capstone Program in the Department of Computer Science and Electrical Engineering at West Virginia University.