David Smith, Chief Innovation Officer, **Lockheed Martin GTL**

David Alan Smith is a computer scientist and entrepreneur who has focused on interactive 3D and using 3D as a basis for new user environments and entertainment for over twenty years. Smith is currently Chief Innovation Officer at Lockheed Martin Mission Systems and Training, where he is focused on next generation human centric computing and collaboration platforms. Smith was the chief architect of the Croquet Project, an open source virtual world collaboration platform where he worked with Alan Kay, Andreas Raab, and David P. Reed. Smith was later CTO and co-founder of Teleplace, Inc. providing a collaboration platform developed specifically for enterprises based on Croquet. In 1987, Smith created *The Colony,* the very first 3D interactive adventure game and precursor to today's first-person shooters. The game was developed for the Apple Macintosh and won the "Best Adventure Game of the Year" award from MacWorld Magazine. In 1989, Smith used the technologies developed for the game to create a virtual set and virtual camera system that was used by James Cameron for the movie *The Abyss*. Based upon this experience, Smith founded Virtus Corporation in 1990 and developed Virtus Walkthrough, the first real-time 3D design application for personal computers. Smith also co-founded several other companies including Red Storm Entertainment with Tom Clancy, Timeline Computer Entertainment with Michael Crichton where he was CEO, and Neomar, a wireless enterprise infrastructure company. Smith worked at the Thomas Lord Research Center in 1986 as a staff scientist working on intelligent object manipulation using robotic tactile sensors, pneumo-elastic and mechanical hands. There he developed a telepresence system using stereo-optics and a dataglove controlling a Puma-560 robot equipped with the pneumo-elastic hand. He began his programming life as a corporate analyst at Thermo Electron Corporation, where he co-developed an enterprise-wide multi-user multidimensional hierarchical spreadsheet program in the APL programming language. In 1982, Smith went to work for Richard Greenblatt and Lucia Vaina as a programmer for Softrobotics, an affiliate of Lisp Machines, Inc. where he developed an expert system for the diagnosis of brain damage using an Apple II as the front end to a Lisp Machine. In 1984, he moved back to the Special Projects Laboratory at Thermo Electron to work for Stelianos Pezaris (Sutherland-Pezaris headmount and Pezaris Array Multiplier), where he designed a process control application and helped to design a multiprocessor distributed controller architecture for a robotic PC plating system.