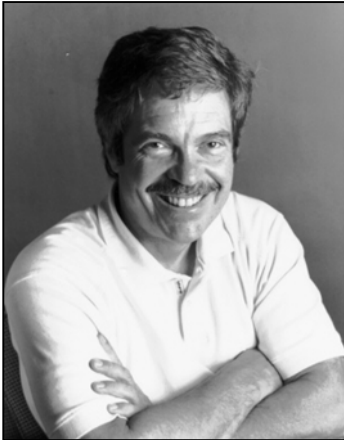


About the Keynote Speakers

Dr. Alan C. Kay



Dr. Alan Kay, Sr. Fellow Hewlett-Packard Company and President of Viewpoints Research Institute, Inc. is best known for the ideas of personal computing, the intimate laptop computer and the inventions of the now ubiquitous overlapping-window interface and modern object-oriented programming. His deep interests in children and education were the catalysts for these ideas, and they continue to be a source of inspiration to him.

One of the founders of the Xerox Palo Alto Research Center, (PARC) he led one of the several groups that together developed modern workstations (and the forerunners of the Macintosh), Smalltalk, the overlapping window interface, Desktop Publishing, the Ethernet, Laser printing, and network "client-servers."

Prior to his work at Xerox, Dr. Kay was a member of the University of Utah ARPA research team that developed 3-D graphics. There he earned a doctorate (with distinction) in 1969 for the development of the first graphical object-oriented personal computer. He holds undergraduate degrees in mathematics and molecular biology from the University of Colorado. Kay also participated in the original design of the ARPANet, which later became the Internet.

After Xerox PARC, Kay was Chief Scientist of Atari, a Fellow of Apple Computer for 12 years, and then for 5 years Vice President of Research and Development at The Walt Disney Company. He founded Viewpoints Research Institute in 2001. In November 2002 he joined Hewlett Packard as a Sr. Fellow. In 2002 he also became an Adjunct Professor in the Department of Computer Science at UCLA.

Dr. Kay has received numerous honors, including the ACM Software Systems Award, the ACM Outstanding Educator Award, and the J-D Warnier Prix D'Informatique. He has been elected a Fellow of the American Academy of Arts and Sciences, the National Academy of Engineering, the Royal Society of Arts, and the Computer Museum History Center. He was a recipient of NEC's C&C Foundation Prize for 2001.

A former professional jazz guitarist, composer, and theatrical designer, he is now an amateur classical pipe organist.

David A. Smith



David has a BA in Mathematics from the University of Chicago in 1981.

David began his programming life as a corporate analyst at Thermo Electron Corporation, where he worked to develop an enterprise-wide multi-user multi-dimensional hierarchical spreadsheet program in APL. This system enabled the CEO to get a real-time view of the entire business through its sophisticated updating and reporting capabilities.

In 1982, David went to work for Richard Greenblatt and Lucia Vaina as a programmer for Softrobotics, an affiliate of Lisp Machines, Inc. where he worked to develop a system for the diagnosis of brain damage using an Apple II as the front end to a Lisp Machine running an expert system.

In 1984, David 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 as well as helped to design a multi-processor distributed controller architecture for a robotic PC plating system. The application was used to design the process that the robotic controller carried out. He also developed a full windows and menus framework for the PC and performed his first experiments in real-time 3D on a PC-XT.

David moved to 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. He also developed a telepresence system using stereo-optics and a dataglove controlling a Puma-560 robot equipped with the pneumo-elastic hand. This allowed the user to manipulate small objects from a distance with full eye-hand coordination. It also demonstrated the need for force-feedback to the user for him to accomplish any reasonably complex micro-manipulation task.

David has been focused on interactive 3D and 3D as a basis for new user environments and entertainment for almost twenty years. He created "The Colony", the very first 3D interactive game and precursor to today's "first person shooters" like Quake... except Colony ran on a Macintosh in 1987. "The Colony" won the "Best Adventure Game of the Year" award from MacWorld Magazine.

In 1989, David used the technologies developed for the game to create a virtual set and virtual camera system that was used by Jim Cameron for the movie "The Abyss". Based upon this experience, David founded Virtus Corporation in 1990 and developed Virtus Walkthrough, the first real-time 3D design application for personal computers. Walkthrough won the very first "Breakthrough Product of the Year" from MacUser Magazine.

David has been focused on 3D component based architectures for the development and deployment of complex environments including interactive entertainment. He is currently working with Alan Kay, David Reed, and Andreas Raab to develop a next generation user environment built with Squeak based upon these ideas.

Andreas Raab



Dr. Andreas Raab was born on November 24th 1968 in Rostock, Germany. He attended the University of Magdeburg (Germany) where he received in 1994 a degree as Diplom-Informatiker (equivalent to Msc in Computer Science) and in 1998 a degree as PhD in Computer Science.

His main background is in Computer Graphics and Interactive Systems. During his PhD research he developed various new techniques for analyzing geometric models (global shape estimation operators), visualizing 3D models (based on real-time non-photorealistic techniques), as well as new interaction metaphors for 3D models (e.g., using zoom techniques for inplace interaction and emphasis in 3D models).

While being at Disney he concentrated on implementing real-time graphics capabilities into Squeak, including support for real-time vector graphics (Flash), real-time 3D graphics, advanced 3D modelling techniques (Teddy), as well as integrating these components into the "eToy" environment (the kids scripting environment).

Besides the work done in the area of Computer Graphics, Dr. Raab also developed an extensive expertise in the area of designing and implementing object-oriented systems. This newly developed knowledge has, for example, helped to redesign the Squeak virtual machine into independent plugins, therefore allowing for an easy extension of low-level operations.

He is fluent on all major computing platforms and programming languages with a few of particular expertise such as C/C++, and Smalltalk. Ever since the original release he has been maintaining the Windows port of Squeak and worked on various other ports (including Windows CE, Sega DreamCast and Sony PS/2).