

**Noel Howard Runyan
Vita**

June 2007

Over thirty-six years experience with microprocessors, digital logic, analog circuits, speech output, systems architecture, human interface design, and development of access technology for persons with disabilities. Extensive development and application of speech and braille interface technologies.

BS Electrical Engineering and Computer Science, University of New Mexico, May 1973.

Founded Speech Works in 1983, renamed Personal Data Systems in 1985, to develop communications devices for persons with visual impairments. Hardware and software design and development of Audapter speech synthesizer and the Talking Tablet System. Authored EasyScan, BuckScan and PicTac scanning programs. Design of accessible touch screen information kiosks. Extensive experience in integrating computer systems with speech, braille, and/or large print output.

Telesensory Systems: 1978 - 1983

Development of serial interface, and other portions of the original VersaBraille, the first braille laptop computer.

Developed and patented a vibrating dots Braille display system.

In charge of the Voice Output Communications Aid (VOCA) research and development project and the TeleBraille deaf blind communicator research and development project

IBM: 1973 - 1978

Magnetic stripe card security systems testing and design for ATMs and BART ticket machines.

Nonvisual display technology research, systems architecture, and human factors engineering.

Developed the first text to speech program ever used on microprocessors.

Used speech synthesizers and microprocessors to develop advanced prototype devices for the visually impaired.

Co-invented the first talking touch screen/tablet systems.

University of Kansas: 1970 - 1970

Worked on Mapsis, a tactile graphics program.

AFWL, Kirtland AFB: 1968 - 1969

Worked on programs for simulating atomic bomb blasts.

Honors and Achievements:

Board of Directors of Peninsula Center for the Blind, 1993-1996, VP of Marketing, 1995; PCB Consumer Advisory Committee, 1992-2004; IBM Special Contribution Award, 1978; Eta Kappa Nu Most Outstanding Electrical Engineering Student in the USA, 1972; Engineering Open House Sweepstakes Award, "Digital Voltmeter with Braille Output", 1971; IEEE Paper Contest, 1st place Local, 3rd place Regional, "Aids and Devices for the Visually Handicapped Engineer", 1971.

Activities and Hobbies:

Performing close-up magic; beekeeping; hydroponic gardening; antique radio restoration; karate.