CURRICULUM VITAE

G. W. Smith
3443 Esplanade Ave., Apt. 438
New Orleans, LA 70119 USA
gsmith@space-machines.com

PROFESSIONAL EXPERIENCE

Founder, Space Machines Corporation, 1999-present

Designer of kinetic art works and motion display systems; responsible for both engineering and aesthetic design as well as the creation of display graphics, promotional literature, and computer-generated 3D renderings and animations. Clients include Absolut Distilleries, the Science Museum of Minnesota, the LSU Alumni Association, and the Baton Rouge Metropolitan Airport. Designed, prototyped, and received U. S. patent (No. 6,389,719) for CyberSign XL, a low-cost electromechanical version of CyberSign licensed by Array Marketing Group of Los Angeles.

Co-founder and Vice-President Creative and Technical, Robotic Displays Corporation, 1988-98

Designed and received U. S. patent (No. 5,063,377) for CyberSign®, a step-motor based, microprocessor-controlled motion display system and kinetic art armature; responsible for both engineering and aesthetic design as well as the creation of display graphics, computer-generated 3D renderings and animations, and kinetic art demonstrators. Total production of CyberSign exceeded 300 systems, and with global distribution. Clients included Apple Computer, Estee Lauder, Revlon, and Albertsons.

Co-founder and Vice-president of R&D, Communications Research Group, Inc., 1981-86

Architect of the BLAST® (Blocked Asynchronous Transmission) data communications protocol (https://en.wikipedia.org/wiki/BLAST_(protocol)) and the best-selling software package of which it was the engine; managed ten member implementation team. This position also involved extensive sales support as a member of teams calling on IBM, AT&T, Ford, etc. The company was purchased by modem manufacturer U.S. Robotics in 1991, which firm also distributed my introductory manual on data communications.

Microcomputer Systems Engineer, Borg-Warner Corporation, 1977-81

Designed distributed computer system for capture, telemetry, and graphic display of environmental data for the Micronova-based Kemputer™ remote monitoring product; managed implementation team; assisted with product management. This position entailed significant experience with atmospheric monitoring instrumentation. Ported FORTRAN numerical model of vehicle drive train, VEHSIM, from Decsystem 10 (36 bit) to VAX/VMS system (32 bit); established Motorola 6800 microprocessor cross-platform development system on VAX/VMS host; wrote staff report on emerging voice response technologies.

Independent Research and Contract Programming, University of Louisville, 1971-1973

Independent research on reading device for the blind at the invitation of the Perceptual Alternatives Laboratory; contract programming for the Department of Psychology and the School of Medicine.

EDUCATION

BA in English Literature, LSU, 1970; coursework included two semesters of studio art and one semester of modern art history

PUBLICATIONS

Art and Design

Smith, G. W., "Art, Aliens, and the Machine", *Leonardo*, 2016. (http://www.mitpressjournals.org/doi/abs/10.1162/LEON_a_01222#.V9xA5NTyvMo)

Smith, G. W., "Swing Low, Sweet Chariot: Kinetic Sculpture and the Crisis of Western Technocentrism", *Arts*, 2015. (http://www.mdpi.com/2076-0752/4/3/75)

Smith, G. W., "Art and Artificial Intelligence", *Artent*, 2015. (http://artent.net/2015/03/27/art-and-artificial-intelligence-by-g-w-smith/)

Smith, G. W., "The Beat Goes On: Responding to Edward Shanken's *Art and Electronic Media*", *Caldaria*, 2014. (http://www.caldaria.org/2014/02/the-beat-goes-on-review-by-g-w-smith.html)

Smith, G. W., "Lin Emery by Philip Palmedo", *Caldaria*, 2013. (http://www.caldaria.org/2013/09/lin-emery-by-philip-palmedo-review-by.html)

Smith, G. W., "Battlestar Galactica", *Caldaria*, 2013. (http://www.caldaria.org/2013/06/battlestar-galactica-by-g-w-smith.html)

Smith, G. W., "From Search Engines to Saxophones: It's the Machine, Stupid!", *On-Verge*, 2013. (http://www.on-verge.org/reviews/from-search-engines-to-saxophones-its-the-machine-stupid/)

Smith, G. "Give Moving Signage a Spin", *Buildings,* 1999.

Smith, G. W., "Let a Thousand Flowers Blossom", *LSU Alumni Magazine*, 1988.

Scientific and Technical

Smith, G. W., & Rubenstein, P., "The Async Route – Best Suited for a Microcomputer's Local Traffic", *Data Communications,* 1984.

Charbonnet, Paul Jr., & Smith, Glenn, "Blasting the Way to Synchronous Communications", *Computerworld*, 1984.

Huh, O. K., Rouse, L. J., & Smith, G. W., "Temperature Features of the Gulf Coast Waters of the United States", *Proceedings of the Eleventh International Symposium on Remote Sensing of the Environment,* 1977.

Sharp, F. H., Smith, G. W., & Surwillo, W. W., "Period Analysis of the Electroencephalogram with Recording of Interval Histograms of EEG Half-wave Durations", *Psychophysiology,* 1975.

GROUP EXHIBITIONS

"L'Amour Industriel" (kinetic), Art by Law Gallery, 1994.
"L'Amour Industriel" (non-kinetic), Art by Law Gallery, 1992.
"Photosynthesis" (maquette), Sandra Zahn Oreck Gallery, 1984.

INSTALLATIONS

"Geodisc", Baton Rouge Metropolitan Airport, 2004.
"Honor Column", LSU Lod Cook Alumni Center, 1999.

AUTOBIOGRAPHICAL SKETCH

The free man believes in destiny – and believes that it has need of him.

Martin Buber

I write as one who is acutely aware of his own good fortune, and which good fortune began with my parents, both of whom were visual design professionals – my mother a Manhattan-trained commercial artist, and my father a civil engineer who went on to the design and construction of upscale homes, and one of which was featured in *Southern Living*.

Pre-university I was actually a science, math, and artificial intelligence enthusiast, and the author of what I now immodestly refer to as the “Smith conjecture” regarding the structure and growth of symbol-mediated knowledge; but at university, the relative inaccessibility of the mainframe computers of the era, combined with a newly awakened love for literary culture, prompted me to switch my major to English Literature – a decision I have never for one second regretted – and I in fact completed a year of graduate school at Vanderbilt University in that field under a full NDEA fellowship.

My actual introduction to the computer came at the University of Louisville. Invited there by scientist Dr. Emerson Foulke to work on a reading device for the blind which I had conceived of as an undergraduate, I had the opportunity to teach myself real-time assembly language programming on an under-utilized PDP-9 minicomputer – a machine having precisely the same architecture as the PDP-7 on which C and Unix were then being simultaneously developed; and this, coupled with the explosive growth of the microprocessor industry, caused me to be more or less drafted into what was to become an eventful career as a software engineer, and which career culminated in my development of the defacto standard BLAST (blocked asynchronous transmission) data communications protocol of the 1980s.

It was the possibility of applying the microprocessor and the digital step motor to the creation of mechanical art, however, which awakened me at the age of thirty to my true calling in life, and one which placed me back in the visual design orbit of my parents: to become a kinetic sculptor – but with the entirely new agenda of "celebrating the grace and precision of the machine as a harbinger of the transcendent creation taking form within the womb of our technological society."

Accordingly, I now completed the design of a microprocessor-controlled “programmable armature” which was not only to be awarded a US patent and commercialized as a motion display system under the name “Cybersign”, but which has also served as the basis for my own work in the field of kinetic sculpture, and which work – benefitting as well from a decades-long friendship with Lin Emery herself – has so far resulted in a memorable group show and two not-insignificant public installations. Mindful now, however, of the environmental impact of my activities, I am currently focused on computer-generated animations as a means of being more selective about the designs which I actually bring into being.

With a background that includes language, technology, and art, it has also been something of a given that I would become involved with the literature of techno art; and a lack of academic standing in the field has, paradoxically, given me a certain degree of latitude in enlarging on the revolutionary pronouncements of techno art pioneer Jack Burnham.

I live in New Orleans with my lovely wife and muse Dianna; and I also have a daughter, Nicole, of whom I am immensely and justifiably proud, and who is an assistant professor at the University of Oregon’s School of Journalism and Communication.