

Scott Myers

Technical Résumé

Summary

Applicant has a broad background in social, art and scientific fields. Early work involves staff positions at Cincinnati Family Service, University of Cincinnati Medical Center Biomedical Communications Department, Cincinnati Medical Center's LASER Lab, and the Cincinnati Contemporary Art Center. Later work includes staff positions at the Yale Medical School, National Institutes of Health, the Lake Placid Olympic Organizing Committee, Wave Hill a public park in the Bronx, ABC Capital Cities as a camera operator and graphics consultant and as a Technical Curator to a shopping center management company. The shopping centers had numerous public sculptures. Work in New York includes work in the art field providing technical support to art programs and public artists. Work in New York includes software and hardware development for industry, science researchers, and science museums. Projects involve the fields of industrial engineering, health sciences, and creating interactive museum exhibits.

Original products currently available include The Virtual Scientist™ an innovative library of Virtual Instruments covering most areas of basic science and music.

Writing experience includes a long running column for Ziff Davis' for *MacWorld* titled **The MacScientist: Creative Engineering**.

Skill Keywords

Executive/Business

Virtual CTO, director of engineering, strategic planning for e-business, technology architect, marketing strategy and product branding, project management, proposal writing, technical writing, course instructor, business development, accounting systems, product development, business start-up experience, film and DVD production, digital video production and editing.

Technical

Internet development: Web design architecture, HTML, DHTML, XML, CSS, Java servlets, Javascript, PHP, SQL, CGI, TCP/IP, streaming video/audio, cross-browser compatibility, New Media, functional design, user interface design.

Programming: G (LabVIEW), Java, Perl, Visual Basic, ActiveX, LabWindows, Fortran, Matlab, Mathematica,.

Environments: LabVIEW, WebObjects, Dreamweaver MX, Flash MX, Final Cut Pro HD, Photoshop CS, Illustrator CS, GoLive CS, Metrowerks CodeWarrior, DVD Studio Pro, OS X Server, InfiniD, Director MX, Douglas CAD/CAM, Adobe Acrobat Professional, Poser, Cinema 4D, Carerra 3D, Nemetschek VectorWorks, Filemaker, Fireworks, PalmOS, Windows, MacOS (Classic and OS X),.

Engineering: Electrical engineering, Biomedical instrumentation systems, analog and digital circuit design, DSP, signal analysis, wavelet analysis, acoustics, bio-acoustics. Data acquisition systems and hardware, GPIB, RS-232, VXI, National Instruments products, sensors,.

Staff Positions

University of Cincinnati Medical Center, Department of Biomedical Communications: Audio Video Engineer, production. Position involved management of teaching resources and production of a daily hour long medical broadcast. Original work includes creation and production of content for Videotaped Information for Patients, VIP. Programs aired via closed circuit in waiting rooms throughout the various local medical centers.

University of Cincinnati Medical Center, LASER Lab: Department of Dermatology, Technician. The LASER laboratory was the first in the country to do experimental skin work removing tattoos, port wine birthmarks, and melanomas. Work involved high level physics, and direct work with patients/subjects. The Cincinnati LASER Lab did original work on LASER safety including the now familiar LASER safety labels. Director Dr. Leon Goldman.

Cincinnati Convalescent Hospital for Children: Playroom Therapist. Participation included design of accessible outdoor playground with theater pit. Original program includes creation and implementation of Special Small Groups, SSG, an off floor 30 minutes movement project for long-term patients. Position involved daily medical rounds.

Cincinnati Contemporary Arts Center: Preparatory, lecturer, manager. Work involved planning and executing installations of the centers art exhibitions. Work moved from preparatory to manager. Director: Jack Bolton Director, Mr. Bolton, now deceased, went on to become a US Ambassador of Art and the chief buyer for the Chase Manhattan Bank Art program.

Yale Medical School, Department of Biophysics and Biochemistry: Lab Technician. Work involved monthly preparation of cow brain powder for research about proteins in blood capillary walls. This lab and two others collaborated to identify the protein sequence of extrinsic blood clotting. Lab Chief, Dr. Koningsburg.

National Institutes of Health: National Institutes of Neurological and Communicable Diseases and Stroke, Lab Technician. Work involved handling of suspected biological pathology, laboratory work with infectious diseases of unknown nature. Lab Chief, Carleton Gajdusek, winner of the 1976 Nobel Prize in Medicine for discovering Mad Cow Disease.

Lake Placid Olympic Organizing Committee: staff position during 1980 Olympics for the Cultural Committee. Projects included preparation and installation of 10 public sculptures, two of which are permanent, and assistance with cultural performances (such as turning pages for Yehudi Menuhin during concerts, and athlete entertainment during the games (mostly pinball game rooms and 1st run movies). Work included consultation with the Sarajevo Olympic Organizing Committee.

Wave Hill: 252nd Street, Bronx New York, a 40-acre public park for four seasons of their sculpture program. Work involved management of public sculpture program's artists and details concerning the construction, installation, and display of their artwork. Art program manager: Linda Macklowe.

ABC/Capital Cities: Video Engineer, summer replacement engineer, operated cameras and performed video calibration/color camera match, NABET union position, programs included Night Line, Good Morning America, daytime television and sports remotes.

American Craft Museum, The Robot Show: Curator, keeper of the robots. Work involved planning, installing, managing and lecturing during the Robot Show. Weekly guest lectures included the New York Police Department bomb squad, etc. Exhibition was one of the most highly attended exhibits for the ACM. Show organized by Robert Malone.

Carl Solway Gallery, Buckminster Fuller Project: A decision was made that Mr. Fuller might be an artist as much as an engineer. His original mathematical contribution coordinate system called dymaxian tensegrity was alluded to in Synergy 1 and detailed in Synergy 2. Mr. Fuller did not invent the geodesic dome, but was honored with a stamp this year by the USPS. Project with the Solway Gallery involved assistance with serializing prints with Mr. Fuller at facilities of his partner Isamu Noguchi in Long Island, NY.

National Shopping Centers, David Bermant Foundation: Technical Curator, public audio-Kinetic Art planning, installation and support. National Shopping Centers owned twelve shopping centers throughout the mid-East, each with significant indoor and outdoor public sculptures. Work involved working with artists to harden sculptures for permanent public

display, installing and maintaining sculptures. Artists included George Rhoads, James Seawright (chairman of the art department at Princeton, <http://www.seawright.net/jamesseawright>), Clyde Lynds, and others.

Company Information

Desktop Laboratories, New York

Owner

Desktop Laboratories makes virtual instruments for researchers, industry and science education. Desktop Laboratories occasionally does work under the moniker: NRG2ART, sic., eNeRGy iN2 ART.

Contract research projects for Science and Industry

Sonomax: Software and sound analysis for an in-ear sound attenuation product for industrial and other noisy environments. Project involved placing tiny microphones inside the ear and simultaneously outside the ear to measure the effectiveness. Project involved software/hardware design to measure baseline of hearing and extent of prior hearing loss from normal aging, environmental causes, or disease. Client: Sonomax.com

Hewlett Packard: 3D human trials, Z axis training, for a hardware device by Hewlett Packard. The device, a battery powered handheld scanner, scanned pages of text and assembled the partial scans into a full page. The sensors required a close perpendicular scan, the software and hardware for this project measured these tolerances in pre-production trials.

US Navy: 3D position and metal detection software and hardware for use by the Navy in landmine location and surface integrity studies of ship hulls. The hardware and software for this project made sure a technician scanned a complete area of interest, no missing grid portions, and took measurements of events in each grid to detect for landmines or surface changes. Client: Naval Surface Warfare Center, Bethesda, MD.

AeroNav Labs: Vibration study of military equipment, to meet military specifications. The hardware and software for this project permitted a technician to test pressures on doors when exposed to pressures. Client: AeroNav, Brooklyn, NY.

VasoMedical: Creation of software to operate a heart recovery device similar to pressure pants worn by fighter pilots. The device reverses pressure and allows the heart to remodel by relieving some of the work done by the heart. Client: VasoMedical, www.vasomedical.com, NASDAQ-VASO

Biomechanics Corporation of America: Fatigue and stress test for telephone line installers. The hardware and software for this project allowed testing of telephone line workers, specifically, to determine forces on workers as they descend from telephone poles after a long work session. Client: Biomechanics Corporation of America, Brooklyn NY. Other projects at BCA included sneaker testing and weight distribution (Nike), and force measurements while firing a rifle. Sensors on shoulder, cheek, and trigger finger. Client: Remington

Göteborg Medical School: software/hardware. Gothenburg, Sweden Motion Analysis Lab. Project involved 3D motion capture and analysis of lower spinal column while in motion. Client: Göteborg University Medical School, Orthopedics Department, <http://www.jru.orthop.gu.se/>

Columbia Medical School: 3D motion analysis laboratory software/hardware. Project involved designing and creating apparatus to measure time, and travel path to target. The hardware and software created for this project tested subjects who picked up a short horizontal rod and placed it a vertical opening of a lit target. Client: Columbia Medical School, Department of Physical Therapy

Columbia Medical School: 3D motion analysis laboratory software/hardware. Project involved accuracy and precision reflex studies of patients with Parkinson's. Client: Columbia Medical Center, NY., Dr. Zach Pine.

**Technical
Consultation**

ABC/Capital Cities

Training with various commercial graphics packages including Adobe Photoshop and Illustrator. Client: Bill Duvall, director of Graphics

**Science Museum
Exhibitions Created**

Boston Museum of Science

Fish on a Stick, a hands-on museum exhibit involving various body shapes. Rubber fish bodies of various shapes attached to flexible sticks are placed in an oval track of laminar flowing water (moving water straightened by moving it through a grid of clear tubes). Strain gages and simple observation provide insight about which body shapes do best in water moving at various speeds, a concept referred to as **aquadynamics**.

Solar Kiosk, a hands-on project involving construction and racing of solar model cars. DTL's involvement included creation of software to let visitors vote on what was the most important feature, view very short movies or other participants, and contribute a short 15-second interview of their own comments.

Galileo Drop, a hands-on museum exhibit involving two tall elevator columns that held small objects. The objects were raised and dropped. The software and hardware created controlled this museum exhibit and measured and plotted the descent. Participants then optionally added comments via a kiosk.

Hall of Science, Queens, NY

Tug of War, a classic tug of war, except the opponent was off site. Visitors pulled a large rope attached to a large calibrated pulley. A video monitor showed contestants in another site with similar equipment. When no opponents were available various animals such as elephants or horses could be substituted providing a sense of various strengths in the animal kingdom.
<http://www.nyhallsci.org/>

Port Authority of NY & NJ

42nd Street Ballroom, Managed overhaul of Audio Kinetic sculpture by George Rhoads. Sculpture is a large, 8' x 8' x 8' Plexiglas and steel sculpture filled with billiard balls, chimes, xylophone bars, a wok, and various pumps and motors. Overhaul involved hinging cabinetry, adding motion detectors to lessen wear and tear, replacing large loop d'loop, and cleaning and painting sculpture.

Forbes Museum

Installation and maintenance of audio-kinetic sculptures in collection at the museum and on the Forbes Highlander, curator Margaret Kelly, <http://www.forbescollection.com/>

**Significant Work
with Individual**

Kristin Jones/Andrew Ginzel, public visual artists. Work includes assistance designing various elements of Metronome, a public sculpture on the Virgin Records building on 14th Street in Manhattan. Work particularly included math and implementation of a large digit forward and

Artists

backward clock, telling the time gone and left in the day.
<http://www.jonesginzel.com/Metronome.html>

Fred Hersch, Grammy nominated Jazz composer. Work includes promotion of Mr. Hersch's composition to Walt Whitman's Leaves of Grass. The performance premiered at Carnegie Hall on March 11th 2005. Work with Mr. Hersch, a high school classmate, involved writing a Talk of the Town piece for *The New Yorker* titled *Turbulent Freshness from Heard Fresh*, and facilitating the commission of a long article about Mr. Hersch for November 2005.
<http://www.fredhersch.com/>

Teaching Experience

Science fair judge for New York City for ten years. Citywide science fair organized by the Association for the Advancement of Science ("AAAS"). The wide range of subjects judged includes Chemistry, Biology, Computer Science, Engineering, Math, Psychology, and Genetics.

Adjunct professor, Teachers College, Columbia University, *Electronics for Researchers*, Movement Science Department, Professor Anne Gentile.

PS234 After school program, "Things That Fly," a hands-on pre-engineering class involving the distinction between falling with style and actual flight. Class maintained equal participation of both genders.

Creation of hands-on science education product collectively referred to as The Virtual Scientist™. The virtual instrument libraries in the Virtual Scientist provide attractive and interesting free play with most areas of basic science including light, pH, heat, physiology, radioactivity, magnetism, logic, electricity, math, physics and music.

Counselor and waterfront director at various camps including YMCA camps and Racquette Lake Girls and Boys Camp in the Adirondack Mountains of New York.

Teacher of after school physical programs at PS234, non-competitive sports activities, and hands-on pre-engineering program titled: "*Things That Fly*." Things That Fly centered on the distinction between falling with style and actual flight.

Tutoring of adolescents for New York Math Regents exams.

Candidate for New York City Department of Education Community Board, Town of Hunter, NY School Board.

Writing Experience

Columnist for Ziff Davis's MacWorld/MacCentral. Four year column was under the moniker: The Mac Scientist: Creative Engineering. The column centered on and hailed technical and creative innovation in the area of science software, multimedia software, web authoring software, educational software, database software, hardware and peripherals. Column involved any innovative technology or technique regardless of platform.

Relationships were nurtured and continue to exist with PR managers at most major software companies.

Lecturing Experience

Workshops performed at various locations including Apple conferences and stores, New York's TekServe, and J&R Computer and Music. Topics include Mac OS X Server, DVD Studio Pro,

Final Cut Pro HD, Dreamweaver, and Photoshop.

Various tours for visitors at Cincinnati Contemporary Arts Center, Lake Placid Olympics Cultural Committee, American Craft Museum and Wave Hill.

Education

Antioch College

Yellow Springs, OH

Bachelor of Science

Majors: Biology, Chemistry, Communications

University of Cincinnati

Cincinnati OH

Liberal Arts, Honors courses in Geology, English

Volunteer Work

Cincinnati Family Service Association: counselor. Director Joseph McDonald, National Director.

PS234: New York Public School, where son Taylor attends. Following the terrorist attacks of September 11th the displaced schools lacked technology. Work involved procuring donations of wireless laptops by working with Apple, Adobe, HP, FileMaker, and TekServe along with the Department of Education to create temporary administrative and teaching networks. Work included significant training and substitute teaching at the school.

National Institutes of Standards and Technology: Desktop Laboratories office and residential loft were near the World Trade Centers; A tripod mounted video beginning shortly after the first impact was provided at no charge to the National Institutes of Safety and Technology ("NIST") at no charge. The video record was used for analysis of building's structural failure.
nist.gov/public_affairs/releases/wtc_briefing_june2305.htm

Village of Tannersville: provided first internet access via local franchise, donated equipment, created first village website using content provided by local high school business class.
<http://www.tannersvilleny.com>

Interests

Teaching
Video production, editing
Piano
Writing
Literature
Mountain biking, swimming, and snowboarding