Curriculum Vitae
David A. Jaffe
davidajaffe.com

EDUCATION

1984	Doctor of Musical Arts and MA degrees in composition, Stanford University
1979	BA degree (music and math), Bennington College
1974-76	Ithaca College School of Music
1963-73	Private music studies

POSITIONS

2007-	Senior Scientist/Engineer, Universal Audio, Inc.
2001-2006	Senior Software Engineer, Analog Devices, Inc.
1996-2001	Founder, Distinguished Engineer, Staccato Systems, Inc.
1995	MacGeorge Fellow in Composition, Melbourne University, Australia
1994	Visiting Lecturer, University of California at San Diego
1992-1996	Audio Software Engineer, Virtual Music Entertainment
1992, 93, 95	Artist-in-Residence, Banff Centre for the Arts
1992-1996	Consultant, Stanford University Office of Technology Licensing
1992	Visiting Lecturer, Princeton University
1991	National Endowment for the Arts Composer-In-Residence, Chanticleer
1990-1992	Violinist in Afro-Cuban ensemble *Tambau e Cuerdas*
1990	Rockefeller Foundation Visiting Composer, Buenos Aires, Argentina
1986-1991	Audio Software Engineer, NeXT Computer, Inc.
1985-2005	Consultant, various clients, including Atari, Apple Computer, Aureal (now Creative Labs), etc.
1984-1986	Software Engineer, Intelligenetics
1983-1991	Lecturer/Research Associate, Stanford University
1980	Composer-in-Residence, Chamber Music Conference and Composers' Forum of the East
1978-	BMI-supported Composer (yearly guaranteed royalty)
1978	Violinist with Tony Trischka Ensemble, tour of northern France
1976-1978	First Violinist in Bennington String Quartet
1972-1975	Violinist/mandolinist with Bottle Hill bluegrass ensemble

FELLOWSHIPS, AWARDS, GRANTS

2013	2013 Orion Visitor, University of Victoria, BC, Canada
2011	Djerassi Fellowship
2004	International Engineering Consortium's DesignCON Award for *VisualAudio* software
2000	California Arts Council/National Endowment for the Arts Artist Fellowship
1998	Ross McKee Foundation Grant to present "Seven Wonders of the Ancient World"
1996	Golden Max award, Bourges Festival, for *SynthBuilder*
1995	Featured Composer, Bratislava Electronic Computer Art & Music Project, Slovakia
1992-95	National Endowment for the Arts Collaborative Fellowship
1988	Grant from US Information Agency Fund for Musicians at International Festivals
1983, 1989	National Endowment for the Arts Composer Fellowships
1986	First Prize, Hamilton Chorus Commission Competition
1983	Prize, Newcomp Composition Contest
1977	Presser Foundation Scholar

COMMISSIONS
Galax Quartet (2014), Lafayette String Quartet (2013), Jack Van Geem (2012), Other Minds, Irvine Foundation, Canada Council (2010), Cello Octet Amsterdam (2009), Villa Sinfonia (2008), Andrew Schloss/SSHRC/Canada Council for the Arts (2006, 2008), Joanne Hood (2005), the Russian Arts Foundation/Russian National Orchestra (2001), Quarks! (2000), Irene Mitri (1999), the International Computer Music Conference and the University of Michigan (1998), Earplay (1997), the Lafayette String Quartet (1996), the University of Victoria (1993), the American Guild of Organists (1992), Lynn Kirby (1992), Chanticleer (1987, 1991), the Modern Mandolin Quartet (1989), the Skidmore College Chorus (1989), the Redwood Symphony (1986), William Wallach (1986), the Kronos Quartet (1984), the Mostly Modern Orchestra (1983), Julie Feves (1982), Edward Gans (1981), David Starobin (1980), the Woolley Foundation (1978), and Bennington College (1978).

CD and DVD RECORDINGS
'Cluck Old Hen' Variations,, and other pieces for strings by David A. Jaffe
        Well-Tempered Productions WTP 5198, 2011
'Wildlife,' and other pieces for computers and instruments by David A. Jaffe
        Well-Tempered Productions WTP 5199, 2011
2004 International Computer Music Conference DVD
        ICMC, Miami, 2004. Includes "Racing Against Time"
The Seven Wonders of the Ancient World
        Well-Tempered Productions WTP 5181, 1996
XXIst century mandolin, acoustic and computer music for the mandolin by David A. Jaffe
        Well-Tempered Productions WTP 5164, 1994
intercambio/exchange, computer music from Buenos Aires and California
        CCRMA, LIPM, CRCA, and the Rockefeller Foundation, 1994. Includes: "American Miniatures"
The Virtuoso in the Computer Age—V
        CDCM Vol. 15. CRC 2190 Centaur, 1994. Includes: "Terra Non Firma"; "Wildlife"
New Music for Orchestra
        VMM 3024, Vienna Modern Masters, 1994. Includes: "Whoop for Your Life!"
CDCM Computer Music Series, Volume 8
        CRC 2091, Centaur, 1991. Includes: "Telegram to the President, 1984"
Dinosaur Music—Music by Chafe, Jaffe and Schottstaedt
        WER 2016-50 Wergo, 1988. Includes: "Silicon Valley Breakdown"
The Digital Domain
        Elektra/Asylum Records 9 60303-2, 1983. Includes: "Finale to Silicon Valley Breakdown"
The Concordia Archival Project
        Concordia University, Montreal, Quebec. Includes: "Bristlecone Concerto 3"

PRESENTATIONS AND GUEST LECTURES (partial list)
Invited speaker at the InStat MDR Microrpocessor Forum, the USENIX Conference in Nashville, the Aspen Design Conference and others. Keynote Speaker at the conference of the Australian Computer Music Association. Papers presented at the IEEE International Conference on Acoustics, Speech, and Signal Processing in Tokyo, and at International Computer Music Conferences at the IRCAM studio in Paris, as well as in Venice, Aarhus, Vancouver, Montreal, Banff, Scotland, Rochester (NY), and Columbus (Ohio). Lectures given at the Lithuanian Music Academy, the University of Colorado, the DAAD Computer Music Festival in Berlin, the LIPM studio in Buenos Aires, Argentina, the *Inst. fuer Experimentelle und Elektroakustische Musik* (Vienna), and at Columbia University, the University of Michigan, Princeton University, Yale University, Stanford University, University of Illinois at Champaigne-Urbana, Mills College, San Jose State University, McAllister College (Minneapolis), San Francisco State University, Sonoma State University, the University of Victoria, and the Universities of California at Berkeley, San Diego and Santa Barbara.

SELECTION OF PERFORMANCES (see also "Catalogue of Compositions")
Performances in over twenty-five countries, including the following concerts: Tytuvenai Festival, Lithuania (2016), Santa Cruz New Music Works (2015), Estonian Academy of Music and Theatre, Tallinn, Estonia (2015), Open Space, Victoria, BC (2012, 2013), Zeltsman Marimba Festival, Arcata, CA (2012), Other Minds Festival, San Francisco (2011), Music Olomouc, Czech Republic (2011), Musis Sacrum Arnhem, the Netherlands (2010), Max Mathews 80th Birthday, Stanford (2007), Electric Eclectics Sound Art and Media Festival, Toronto, Canada (2008), Earshot Jazz Series, Seattle (2007), Electronic Music Foundation, NY (2007); Music by the Sea Festival, Bamfield, BC, Canada (2007), Roulette, New York City (2006), Winnipeg New Music Festival, Canada (2004); Jack Straw Studio, Seattle (2003), Brandon University, Canada (2002); Villa Montalvo, Saratoga, California (2001); Society for New Music, Syracuse, NY (2000); San Francisco Symphony chamber music series (1998); the Earplay concert series, San Francisco (1998); the San Francisco Contemporary Music Players concert series (1998, 1985); Festival of the Union of Writers and Artists of Cuba, Havana (1997); the International Computer Music Conference (Miami, Florida, 2004; Ann Arbor, Michigan, 1999; Thessaloniki, Greece, 1997; Banff, Canada, 1996, Arhus, Denmark, 1994; Montreal, Canada, 1991; Glasgow, Scotland, 1990; Vancouver, Canada, 1985; Denton, Texas, 1981); the Discoveries Festival in Aberdeen, Scotland (1997); the Bourges Festival, France (1994); the Cabrillo Music Festival, California (1991, 1986); *Festival Por La Musica en Las Americas*, Buenos Aires (1991); the Chanticleer concert series, San Francisco (1991, 1986); the Bergen Festival, Norway (1989); the ISCM Warsaw Autumn Festival, Poland (1987); the Brooklyn Philharmonic concert series, New York City (1986); the American Festival in London, England (1984); the Saint Paul Chamber Orchestra concert series, Saint Paul, Minnesota (1984); the Berlin Festival, Germany (1983); the Venice Biennale, Italy (1982).

PUBLISHED COMPOSITIONS
Silicon Valley Breakdown, Schott, Weihergaten 5, 6500 Mainz, Germany, 1988.
Ellis Island Sonata, Plucked String Editions Incorporated, PO Box 11125, Arlington, VA, 1987.
All other works published by Terra Non Firma Publishing, 739 Hilldale Avenue, Berkeley, CA.

INSTRUMENTAL SKILLS
Mandolin, violin, viola, guitar, 5-string banjo, mandocello and conducting; also have studied percussion, cello, oboe and trombone.

RECORDINGS AS PERFORMER (in addition to those listed above)
Heartlands, Tony Trischka. L.P. recording. Rounder, 1975.
All Old Friends, Stacy Phillips. L.P. recording. Revonah, 1975.
Light our Way Along the Highway, Bottle Hill. L.P. recording. Biograph, 1976.
Red and Rusty,
Litany of Tides (Henry Brant), the San Jose Symphony Orchestra. Sonic Arts Corporation, 1983.

COMPUTER MUSIC EXPERTISE
Seminal research in physical modeling sound synthesis and ensemble timing. Have architected, managed and implemented large multi-component software projects, from conception to delivery. Fluent in application, system and DSP programming, object-oriented software design, real-time programming, multi-processor systems, music languages, multi-threaded/interrupt-level programming, multi-platform development.

PATENTED INVENTIONS
System and Method for Generating Fractional Length Delay Lines in a Digital Signal Processing System.
     S. Van Duyne, D. Jaffe, G. Scandalis, T. Stilson. (Patent No. 5,742,532; granted 4/21/98.)
Digital Signal Processing System and Method for Generating Musical Legato Using Multitap Delay Line
     with Crossfader. D. Jaffe, J. Smith. (Patent No. 5,781,461; granted 7/14/98)

WRITINGS

The Computer-Extended Ensemble. D. Jaffe and A. Schloss. 1994. Computer Music Journal, MIT Press, 18(2):78-86.

The Computer-Extended Ensemble. D. Jaffe. LULU, Revista de teorias y tecnicas musicales, 1(2), Buenos Aires, Argentina.

Comments on Multimedia, Performance and Interactive Instruments. D. Jaffe. Proceedings of the Music Unlimited seminar, Australia Council for the Arts, Sydney Australia, 1996.

Efficient Dynamic Resource Management on Multiple DSPs, as Implemented in the NeXT Music Kit. D. Jaffe. Proceedings of the 1990 International Computer Music Conference, Glasgow, Scotland, Computer Music Association, pgs. 188-190.

Ensemble Timing in Computer Music. D. Jaffe. Proceedings of the 1984 International Computer Music Conference, Paris, Computer Music Association, pgs. 185-189.

Ensemble Timing in Computer Music. D. Jaffe. 1985. Computer Music Journal, MIT Press, 9(4):38-48. Reprinted as Music Dept. Tech. Rep., Stanford University, 1985.

Extensions of the Karplus-Strong Plucked-String Algorithm. D. Jaffe and J. Smith. 1983. Computer Music Journal, MIT Press, 7(2):56-69. Reprinted in book form in *The Music Machine*, ed. Curtis Roads, 1989, MIT Press, pgs. 481-494.

Impossible Animals: Notes on Birds and Musical Style. D. Jaffe. Perspectives of New Music, 33(1,2):604-613.

In Memorium, Henry Brant (2008), Other Minds web site: www.otherminds.org/shtml/Brantinmemoriam.shtml.

Intelligent Musical Instruments: The Future of Musical Performance or the Demise of the Performer? A. Schloss and D. Jaffe. Interface Journal for New Music Research, Netherlands, 22(3):183-193.

A Lossless, Click-free, Pitchbend-able Delay Line Loop Interpolation Scheme. S. Van Duyne, D. Jaffe, G. Scandalis and T. StilsonProc. Proceedings of the 1997 International Computer Music Conference, Thessaloniki,Greece, Computer Music Association, pgs. 252-255.

The Making of Wildlife. D. Jaffe and A. Schloss. Proceedings of the 1992 International Computer Music Conference, San Jose, CA. Computer Music Association.

Music and the Computer: Up-Ending the Family Tree. D. Jaffe. Keynote address to the 1995 Australian Computer Music Association. Proceedings of the 1995 ACMA Conference, Melbourne, Australia. ACMA. pgs. 1-5.

Music System Architecture on the NeXT Computer. J. Smith, D. Jaffe and L. Boynton. Proceedings of the 1989 International Conference of the Audio Engineering Society, Toronto, Canada, pgs. 301-312.

Musical and Extra-Musical Applications of the NeXT Music Kit. D. Jaffe. Proceedings of the 1991 International Computer Music Conf., Montreal, Computer Music Association, pgs. 521-524.

The Music Kit on a PC. D. Jaffe, J. O. Smith, N. Porcaro. 1994. Proceedings of the First Brazillian Symposium of Computation and Music, XIV Congress of the Brazillian Society of Computation, Caxambu, MG. pgs. 63-69.

Orchestrating the Chimera—Musical Hybrids, Technology and the Development of a ªMaximalistº Musical Style. D. Jaffe. Leonardo Music Journal, 5:11-18 (1995).

An Overview of the NeXT Music Kit. D. Jaffe. Proceedings of the 1989 International Computer Music Conference, Columbus, OH, Computer Music Association, pgs. 135-138.

An Overview of the NeXT Music and Sound Kits. D. Jaffe and L. Boynton. 1989. Computer Music Journal, MIT Press, 14(2):48-55. Reprinted in book form in *The Well-Tempered Object*, ed. Stephen Pope, 1991, MIT Press.

Performance Expression in Commuted Waveguide Synthesis of Bowed Strings. D. Jaffe and J. Smith. 1995. Proc. of the 1995 International Computer Music Conference, Banff, Canada, Computer Music Association, pgs. 343-346.

Rapid Searches for Complex Patterns in Biological Molecules. R.Abarbanel, P. Wieneke, E. Mansfield, D.Jaffe and D. Brutlag. Nucleic Acids Research, Sept. 1983.

Real Time Sound Processing & Synthesis on Multiple DSPs Using the Music Kit and the Ariel QuintProcessor. D. Jaffe and J. Smith. Proceedings of the 1993 ICMC, Tokyo, Japan; CMA.

Source Separation and Note Identification in Polyphonic Music. C. Chafe and D. Jaffe. 1986 Proceedings of the International Conference on Acoustics, Speech and Signal Processing, Tokyo, Japan, 1986(2):1289-1292.

Spectrum Analysis Tutorial. 1987. D. Jaffe. Computer Music Journal, MIT Press, 11(2):9-24 and 11(3):17-35.

Symposium on Comptuer Music Composition. C. Roads, D. Jaffe, M. Battier, et al. Computer Music Journal, MIT Press, 10(1):40-63.

SynthBuilder—A Graphical Rapid-Prototyping Tool for the Development of Music Synthesis and Effects Patches on Multiple Platforms. N. Porcaro, D. Jaffe, P. Scandalis, J. Smith, and T. Stilson. Computer Music Journal, MIT Press, 22(2):35-43.
Music Conference, Banff, Canada, Computer Music Association, pgs. 61-62.

SynthBuilder—A Graphical Real-Time Synthesis, Processing and Performance System. N. Porcaro, P. Scandalis, J. Smith, D. Jaffe, and T. Stilson. Proceedings of the 1995 International Computer Music Conference, Banff, Canada, Computer Music Association, pgs. 61-62.

SynthBuilder and Frankenstein, Tools for the Creation of Musical Physical Models. N. Porcaro, W. Putnam, P. Scandalis, D. Jaffe, J. Smith, T. Stilson, S. Van Duyne. Proceedings of the 1996 International Conference on Auditory Display, Palo Alto, Santa Fe Institute and Xerox Parc.

A Synthesizer Debugger. D. Jaffe. Proceedings of the 1983 International Computer Music Conference, Rochester, NY, Computer Music Association, pgs. 110-112.

Techniques for Note Identification in Polyphonic Music. C. Chafe, D. Jaffe, K. Kashima, B. Mont-Reynaud, J. Smith. Proc. of the 1985 International Computer Music Conference, Vancouver, Canada, Computer Music Association, pgs. 399-406.

Ten Citeria for Evaluating Synthesis and Processing Techniques. D. Jaffe. 1995. Computer Music Journal, MIT Press, 19(1):76-87. Also: Proceedings of the First Brazillian Symposium of Computation and Music, Brazillian Society of Computation, Caxambu, MG. 53-61.

Using SynthBuilder for the Creation of Physical Models. N. Porcaro, P. Scandalis, D. Jaffe, J. Smith. Proceedings of the 1996 International Computer Music Conference, Hong Kong, Computer Music Association, pgs. 87-88.

A Virtual Piano Concerto—Coupling of the Mathews/Boie Radio Drum and the Yamaha Disklavier Grand Piano in "The Seven Wonders of the Ancient World". D. Jaffe and A. Schloss. Proceedings of the 1994 International Computer Music Conference, Arhus, Denmark, Computer Music Association, pgs. 192-195.

VisualAudio—An Environment for Designing, Tuning, and Testing Embedded Audio Applications. D. Jaffe, P. Beckmann, B. Peddie, T. Stilson, S.Van Duyne. Proceedings of the 2005 Conference of the Audio Engineering Society, New York City, NY.

PRINCIPAL SOFTWARE PROJECTS

UAD2, Apollo and *Realtime Rack,* principal architect, of DSP sub-system and other sub-systems
Universal Audio, Inc., 2007
A hardware accelerator and audio interface for rendering simulations of classic analog studio.

VisualAudio, principal architect, Analog Devices, Inc., 2004
A system for creating embedded audio applications, includes OS, audio modules and design tool.

SmartAnimator, contributor, Analog Devices, Inc., 2002
A software development kit for integrating algorithmic wave-table synthesis into games.

SoundMAX, principal architect, Analog Devices, Inc., 2001
A MIDI wavetable/physical-modeling engine that has shipped on millions of PCs.

SynthCore, principal architect, Staccato Systems, Inc., 1999
A physical-modeling engine for games and music.

Quest for Fame and other titles, chief audio programmer, Virtual Music Entertainment, Inc., 1996
Music-based multi-platform games.

SynthBuilder, contributor, Sondius, Stanford University, 1996
A graphical environment for developing physical modeling synthesis algorithms.

The Music Kit, principal architect, NeXT Computer, Inc., 1989
An software development kit and associated applications for music and sound.

Quest, contributor, IntelliGenetics, Inc., 1982 - Gene-searching software.

SEE ALSO: CATALOGUE OF COMPOSITIONS (davidajaffe.com)