Craig Caldwell, Ph.D.­

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Précis:

• Academic Experience: USTAR Professor, University of Utah (’09-Present); Professor, Griffith University (’06-’09); Professor, University of Arizona (’94-’06) (Professor Emeritus); Professor, Northern Arizona University (’76-’94); Columbus College of Art and Design(’74-’76); Visiting Professor in Animation, Beijing Film Academy (’07),

• Professional Experience: *Walt Disney Film Studios, Feature Animation Division* (’97-’99 and returned in ’04–‘05) Burbank, California; *Electronic Arts* (‘05-’06) Tiburon Studio, Orlando, FL.

• Recent Conference Presentations: Comic Con International, San Diego '18, SIGGRAPH '14,'16,'18, '20; SIG-ASIA '14,'15,'16, '21; Mundos Digitales '12-'14,'16,'18,'22 (La Coruna, Spain); FMX '13-'22 (Stuttgart), Kre8tif! '17 (Kuala Lumpur), Seoul International Imagination (SI3) '17 (Korea), Bengaluru GAFX '17 (India), Animist '18 (Istanbul, Turkey).

• Education Ph.D. (1989) Computer Graphics/Animation from ACCAD (Advanced Computing Center for Art

 and Design), The Ohio State University; M.F.A. Painting/Drawing/Photography, University of Florida; B.A. Fine Art, Florida Southern College.

• Administration Experience: Director of Game Arts, EAE, UofU (’10-‘15); Head of School/Professor, Griffith Film School, Queensland College of Art, Griffith University (’06-‘09); Chair Media Arts Dept. University of Arizona (’99-‘04); Associate Director, College of Fine Arts New Media Center UofA (’94-‘97); Co-Director, Northern Arizona University Interdisciplinary Visualization Center (’90-’94); Director, ARTs Lab/Studio NAU (’89-’94).

• Grants and Fund Raising. $9+ million.

Work Experience:

University of Utah, Salt Lake City, Utah CIDAT

USTAR [Professor](http://www.film.utah.edu/index.php/faculty/detail/craig_caldwell/)(full & tenured) 2009 – present

Director of Game Arts, Entertainment Arts and Engineering, 2010 – 2016

[*USTAR*](http://www.ustar.utah.edu/ustar-faculty) *(Utah Science Technology and Research*) entrepreneurial initiative, funded by the UTAH legislature. The USTAR Digital Media Cluster has been an interdisciplinary team from the College of the Arts and the School of Computing. A co-founder of the Masters Games Studio in 2010 within [EAE](http://eae.utah.edu/) (Entertainment Arts and Engineering [2020 national ranking - #1 undergraduate, #3 graduate]) with a medical game unit (Therapeutic Game Apps) creating serious games for Health Sciences (500K funding 2015). Published text *Story Structure and Development: A Guide for Animators, Game Designers, VFX Artists, and Interactive Artists*, CRC Publishers, 2017. [Amazon Link](https://www.amazon.com/Story-Structure-Development-Animators-Designers/dp/149878173X/ref%3Dsr_1_1?dchild=1&keywords=craig+caldwell+story&qid=1601918936&sr=8-1)

Committees: Member of Advisory Board (2019-present), Shanghai Institute of Visual Art (SIVA), Shanghai, China. Utah Digital Media Acceleration Strategy Commission. [Utah Film Commission](http://film.utah.gov/) Advisory Committee 2016-2017. One of the founders of [UDEN](http://www.utden.org/) (Utah Digital Entertainment Network) established in 2015 – a monthly networking of professionals to increase economic impact of Digital Media in Utah. Utah’s Push Button (Digital Media) Conference Committee 2011-2013. Executive Committee for [SpyHop](http://spyhop.org/) 2012-2015 – community based program for youth. Sundance Film Festival panel on Digital Media, 2012 & 2013. Reviewer for Ottawa’s (Canada) Postsecondary Education Assessment Board 2011, 2012, 2018 – Sheridan College Animation Program. New General Education courses created: *Animation: Then |Now|Next,* and *Women Directors.* BFA in Animation (FMA Department) approved by Board of Regents 2019.

Griffith University, (Brisbane, Australia) www.griffith.edu.au

Head & Professor, [Griffith Film School](http://www.griffith.edu.au/visual-creative-arts/queensland-college-art/studios/griffith-film-school), Queensland College of Art, 2006-2009

Head of the Queensland’s College of Art’s Griffith Film School, Senior Officer (Animation, Film and Digital Media) – GFS, the largest animation/games/film school in Australia. 450+ majors. Implemented new interdisciplinary Bachelors in Game Design and first MFA, at QCA, for interdisciplinary applications. Oversaw school’s day-to-day Budget, Personnel, and Scheduling ($2+M budget). Responsible for acquitting Queensland State government’s grant for the School’s move into a new building that united two separate academic units from the South Bank and Nathan campuses. Initiated new student WIL (Work Integrated Learning) opportunities.

a. Expanded enrollment by 32% (international [i.e. India, China, Singapore] and domestic).

b. Eliminated school deficit $510K (2006), with surplus $232K (2008). Increased number of full time faculty, updated technology in all labs, and established an equipment reserve for scheduled upgrades.

c. Extensive curriculum revision to meet international standards.

d. Increased undergraduate application preferences by 68% in 2008; and an additional 23% in 2009.

f. Initiated Motion Capture facility with Brisbane game industry. Partnered with Sega-Australia to set up $800K Professional Motion Capture studio on Nathan campus.

g. Member of State of Queensland Screen Industry Development Council, State of Queensland Higher Education Assessment Panel, and Member of Premier’s (Governor) trade delegation to Mumbai (2008).

h. MOU with Whistling Woods International (Mumbai, India), Beijing Film Academy (Beijing, China) and Nanyang Polytechnic (Singapore).

Electronic Arts University, Electronic Arts (Orlando, FL)

Creative Training, Tiburon Studio 2005-2006

Artistic instruction and curriculum development in 3D applications and the Game Design production pipeline. Training artists in Maya and the studio’s proprietary artistic production processes created for the games “*Superman Returns*”(2006), “*Madden ‘07*”, *“NFL Coach”* etc. Training initiated at three levels of instruction: literacy, competency and mastery.

Walt Disney Film Studios, Feature Animation (Burbank, CA)

Cross-Technologies Specialist: Artist Development Academy 2004-2005

(See Disney below)Asked to return to Disney totrain artists in the studio’s new proprietary production software being created for “*Chicken Little*”(2005) , “*Meet the Robinsons*”(2006), “*American Dog/Bolt*”(2008), and “*Rapunzel Unbraided*”(2009). Instruction and research/development of production processes for editorial (AfterEffects), Disney Shake for ShotFinaling, Maya Lumiere for Texture & Lighting, Maya for everything etc. In addition, coordinated instructors and as well as taught Figure Drawing, which was a daily fixture in Disney’s Artist Development Academy.

University of Arizona, Art Dept. & Media Arts Dept. Tucson, AZ 1994 – 2006

 1. Media Arts Dept., Professor (tenured), Department Chair 1999 – 2004

The 11th largest UofA department with over 552 majors, 170 minors, and 61 interdisciplinary students. Responsible for day-to-day Budget, Personnel, Scheduling, Management, and External Relations for department. Consolidated and moved department into new building with expanded computer labs. Significantly increased the Media Arts (MAR) Industry Internship program. Guided the establishment of the Vivian and Jack Hanson Film Institute, ($8 million endowment) in 2003. Media Arts Development Board created internship scholarships organized the annual MAR Entertainment Industry reunion in Los Angeles. Created a new Producing BA degree and an interdisciplinary Digital Media degree between Art and Film. Partner in Internet Technology Commerce and Design Institute (Creating Collaborations Through Research Awareness). Inaugural faculty member for the interdisciplinary BA in Engineering program

1. Guided the donation and bequeath for College’s [Vivian and Jack Hanson Film Institute](http://hansonfilm.org/) ($8 million).
2. Developed the department’s Academic Program Review 2001 (978 pages)
3. Enhanced department’s Student Credit Hours by 23% and implemented department online instruction.
4. Increased course offerings by 15%; Increased income from summer/winter sessions by 34%;
5. Initiated higher standards for department admission; raised 4-year graduation rate to 98%;
6. Directed revision of Graduate Program of Study from general courses to emphasis areas.
7. Evaluator, ACICS - Accrediting Council of Independent Colleges & Schools.

Transitioned from Art Dept. to Media Arts Dept. in 1999 due to interdisciplinary focus in my work.

 2. Art Dept., University of Arizona 1994-1999

Professor (full & tenured), Instruction & curriculum design in Visual Communication area. Redesigned & updated Visual Communication digital lab for Graphic Design, Illustration, and Computer Graphics. Courses: Computer Graphics & Animation, Interactive Multimedia (see courses taught). Coordinator of the Visual Communication Computer Laboratory (‘94-‘97). Director of Graduate Studies (’95-’97), Core Committee for NASAD re-accreditation.

Associate Director, New Media Center, College of Fine Arts 1995-1997

Interdisciplinary team for establishing New Media [College and University-wide level committees] in the College and as member of National New Media Consortium. Offered digital training for all arts faculty. College of Fine Arts representative for UofA Faculty Development Partnership and UofA Faculty Center for Instructional Innovation. Responsibilities included coordination of research, equipment specification, acquisition, setup, and training.

Walt Disney Film Studios, Feature Animation (Burbank, CA)

3D Technologies Specialist: Artist Development. 1997-1999

Instruction/Production for Disney Feature Animation. Curriculum design and instruction in 3D applications (Maya, SoftImage, etc.) and Disney proprietary software. Worked closely with digital and traditional animators, modelers, layout, visual development, VFX, editorial, lighting etc. Constructed learning modules for specific animated movie shots and digital production needs (*Mulan, Tarzan, Dinosaurs etc*.). Conducted research into the Disney traditional pipeline as integrated into the digital process. Lecture/demonstration series for feature animation division (i.e. Chuck Jones, Alan Kay, John Lasseter, Bill Gates etc. *Disney University* Management Workshops Facilitated instruction by supervisors/artists of animation, modeling, rigging, cinematography, editorial, story, effects, visual development, digital software development and shot-finaling.

Returned to Chair the department of Media Arts in 1999.

Northern Arizona University (Flagstaff, AZ)

Professor (tenured),: School of Art & Design 1976-1994

Director ARTs Computer Studio, College of Fine Arts, 1989-1994

Dean’s nomination for the President's Teaching Award, 1989. Phi Kappa Phi Faculty Artist of the year (1987). Ranked school’s #1 teaching faculty (’89,’90,’91); selected as *Wakonse Teaching Excellence Fellow*. Taught figure drawing, illustration, and painting with emphasis on realistic skill acquisition coupled with strong underlying design foundation. Lead (’84-’86) 2D Area (Painting, Drawing, Printmaking). Founded the computer graphics and animation program. NSAD accreditation core committee.

Co-Director NAU Computer Visualization Center(with Dr. Lanny Mullens, Chair, Computer Science)

Interdisciplinary facilities jointly run by Art and Computer Science. Responsibilities included system administration, planning, support, and dissemination. This involved the complete setup and maintenance of SGI workstations, software, digitizers, animation controller, etc. Work focused on interdisciplinary visualization projects. Taught the Computer Graphics classes for Computer Science and Engineering Dept. in the late 80’s CSE282 Computer Graphics &CSE382 Computer Graphics II.

Columbus College of Art and Design (Columbus, Ohio) 1974-1976

 Full-Time Faculty. First Year Drawing, Figure Drawing, First & Second Year Painting.

Affiliations:

 DETAO Group - <http://www.detaoma.com/en/>

SIGGRAPH - Special Interest Group in Graphics

 ISEA - Inter-Society for the Electronic Arts

 CAA - College Art Association

Education:

*Ph.D.* The Ohio State University, Columbus, OH 1989

*Advanced Computing Center for the Arts and Design,*

 Phi Kappa Phi Honor Society, First Ph.D. in discipline, Dissertation: *A Physically-based Simulation Approach to Three-Dimensional Computer Animation****.***

 Dissertation Advisors: Tom Linehan (Chair), Charles Csuri, Rick Parent

Work focused on applications of motion simulation (kinematics, dynamics, and behavioral simulation) research for the computer animation production pipeline.

*M.F.A.* University of Florida, Gainesville, Florida

 Painting/Drawing, Photography (Art Department); Minor - Art Education

Content focus on the communication and perception of information through narrative context provided the thematic foundation**.** Thesis: *Reality as the Artist's Intent*.

Thesis Advisors: Hiram Williams (Painting), Todd Walker (Photo), Jerry Uelsmann (Photo)

*B.A.* Florida Southern College, Lakeland, Florida

Major – Painting & Drawing (Art Department); Minor – Music

Instruction:

University of Utah

FILM1600 Animation: Then|Now|Next (Online) EAE 6920 Game Art/Assets

FILM1600Animation:Then & Now (Hybrid 2014) EAE 6950 Game Production

EAE 3660 Machinima(Pre-visualization) EAE 6721 Game Projects MGS

FILM 2600 Storyboarding

Griffith University

QCA/GFS 2111 3D Environments QCA/GFS 2116 Adv. Character Animation

QCA/GFS 2113 CGI Animation QCA/GFS 3114 Visual Story/Storyboarding

University of Arizona

ART261 Intro to Computer Graphics ART195 New Computer Animation Techniques

ART361 Computer Animation ART461 Digital Imaging

ART297 Computer Graphics Applications ART497/597 Multimedia

MAR/ART268 Intro to Computer Anim MAR/ART568 Storyboarding

MAR/ART306 3D Computer Animation MAR/ART506 Multimedia Authoring

MAR/ART203 New Media Art

Northern Arizona University

ART198 Computer Imagery ART398 Computer Graphics

ART228 Intro/Comp. Graphics ART328 2D & 3D Computer Animation

ART398 4D Design/Animation ART482 Computer Visualization

ART600 Individual Problems ART696 Independent Study

BEM499 Computer Graphics (Special Assignment - Electronic Media, School of Communication)

CS170 Intro to Computer Graphics Programming (Special Assignment - Computer Science Department)

ART Department - Traditional Studio Courses

Drawing I & II, Figure Drawing, Figure Painting, Painting I, II, & III, Art Dept. Capstone, Graphic Design I, Illustration I, Special Topic – Animation, Special Topic – Portrait Painting, Watercolor, Pastel; Graduate Painting, Graduate Drawing.

Publications:

^ Refereed ^^ Invited

^ Craig Caldwell (2021). When we talk about story, what is it? (pp. 15). ACM-SIGGRAPH Asia 2021. Conference Paper, Professional, Published, 12/17/2021.
<https://dl.acm.org/doi/10.1145/3476117.3483430>

^ Craig Caldwell (2020). What we talk about, when we talk about story. (pp. 15). ACM-SIGGRAPH 2020. Conference Paper, Professional, Published, 08/21/2020.
<https://dl.acm.org/doi/abs/10.1145/3388769.3407548>

^ Caldwell, C. (2018), Conference Proceedings, *SIGGRAPH 2018* *Story: It’s not just for writers… anymore* Conference DVD-ROM and ACM Digital Library http://www.siggraph.org/2018/. Edited Volume, Published, 8/01/2018.Caldwell, C. (2018), Conference Proceedings, *SIGGRAPH 2018* *Story: It’s not just for writers… anymore* Conference DVD-ROM and ACM Digital Library http://www.siggraph.org/2018/. Edited Volume, Published, 8/01/2018.

^ Caldwell, C. (2017), *Story Structure and Development*, *A Guide for Animators, VFX, Game Designers, and VR Creators.* CRC Press (formerly Focal Press) 1st edition book, (June 1, 2017). 224 pages, ISBN-13: 978-148781732

^ Caldwell, C. (2016), Conference Proceedings, *SIGGRAPH ASIA 2016* *Story Structure for Programmers, Designers, Animators, and Artists* Conference DVD-ROM and ACM Digital Library http://sa2016.siggraph.org. Edited Volume, Published, 12/08/2016. ISBN: 978-1-4503-4538-5 Article No. 7. <http://dl.acm.org/citation.cfm?id=2988472&CFID=922709935&CFTOKEN=51838540>

^ Caldwell, C. (2016), Conference Proceedings, *SIGGRAPH 2016* *Story: It’s not just for writers… anymore* Conference DVD-ROM and ACM Digital Library http://www.siggraph.org/2016/. Edited Volume, Published, 7/23/2016.

### ^ Caldwell, C. (2015), Conference Proceedings, *SIGGRAPH 2015* Bringing Stories to Life: For Programmers, Animators, and Interactive Designers Conference DVD-ROM and ACM Digital Library http://www.siggraph.org/2015/. Edited Volume, Published, 8/06/2015.

^ Caldwell, C. (2014), Conference Proceedings, SIGGRAPH Asia 2014, Story Development for Animators and Game Artist. Conference DVD-ROM and ACM Digital, Library http://www.siggraph.org/asia2014/. Edited Volume, 12/03/2014. http://dl.acm.org/

^ Caldwell, C. (2013), Conference Proceedings, SIGGRAPH Asia 2013, Story for Game Designers, Animators, and VFX Artists. Conference DVD-ROM and ACM Digital, Library http://www.siggraph.org/asia2013/. Edited Volume, Published, 11/25/2013. http://dl.acm.org/

^ Caldwell, C., Bruggers, C.; Altizer, R.; Bulaj, G.; D'Ambrosio, T.; Kessler, R. (2013). *Interactive Entertainment '2013*, The Intersection of Video Games and Patient Empowerment: case study of a real world application. Copyright 2013 ACM 978-1-4503-2254-6/13/09, Refereed Conference Proceedings, Published 09/2013. http://dx.doi.org/10.1145/2513002.2513018.

^ Caldwell, C. (2013), Conference Proceedings, *SIGGRAPH 2013*, Story: It’s not just for writers… Anymore. Conference DVD-ROM and ACM Digital Library http://www.siggraph.org/2013/. Edited Volume, Published, 7/21/2013.
 <http://dl.acm.org/>

^ Carol S. Bruggers (2012), Roger A. Altizer, Robert R. Kessler, Craig B. Caldwell, Kurt Coppersmith, Laura Warner, Brandon Davies, Wade Paterson, Jordan Wilcken, Troy A. D’Ambrosio, Massiell L. German, Glen R. Hanson, Lynn A. Gershan, Julie R. Korenberg, and Grzegorz Bulaj. Journal of Science Translational Medicine *(ranked one of the top journals in the field),* Sci Transl Med, 19 September 2012: Patient Empowerment Interactive Technologies: a Non-pharmacological Strategy for Fighting Diseases. Vol. 4, Issue 152, p. 152ps16, Sci. Transl. Med. DOI: 10.1126/scitranslmed.3004009 <http://stm.sciencemag.org/content/4/152/152ps16>

^ Caldwell, C. (2012), Conference Proceedings, SIGGRAPH Asia 2012, Story Structure for Programmers. Conference DVD-ROM and ACM Digital Library http://www.siggraph.org/asia2012/. Edited Volume, Published, 11/28/2012. http://dl.acm.org/

^ Caldwell, C. (2012), Kessler, R., Referred Paper, IGIC 2012 (IEEE International Games Innovation

Conference), *When the games industry and academia collide: How we impact each other*.

September 2012. http://ice-gic.ieee-cesoc.org

^ Caldwell, C. (2011), Changing the Creative Paradigm in teaching Graphics,Refereed Paper, TEXT

Journal, Special Issue on Screen Media Production/Creative Arts, Editors Gillian Leahy and Mick Broderick

^ Caldwell, C. (2010), *Professor as Executive Producer*, Refereed Paper, Conference Proceedings, Sydney, Australia, ASPERA (Australian Screen Production Education & Research Association).

^ Caldwell, C. (2008), *Animation:Creative versus Technical Skills*, Refereed Paper, Conference Proceedings, Beijing, China, CILECT News Journal (CENTRE INTERNATIONAL DE LIAISON DES ECOLES DE CINEMA ET DE TELEVISION), The International Association of Film and Television Schools, Spring 2010.

^ Caldwell, C. (2008) Refereed Paper SIGGRAPH ASIA 2008, *Creative versus Technical Skills*

 *in Computer Animation*. Dec 2008.

^ Caldwell, C. (2008) Digital Dialogues, National Media Education Conference Proceedings

(SAAME), *Digital Media*, Adelaide, Australia, Sept. 2008.

^^ Editorial/Referee for Focus Press Books, 2007, Oxford, UK;

Current Editorial project - “Ideas for Animators”, author Karen Sullivan, 2008

^ Caldwell, C. (2003) “Expanding the Boundaries: Designing New Media Interdisciplinary

 Curriculum” International Symposium on Electronic Art Proceedings, Nagoya, Japan

^ Caldwell, C. (2002) “25 Years in Computer Graphics”, Computer Graphics World, Jan. 2002,

^ Caldwell, C. (2001) “Pre-Production: The Industry Secret”, Computer Graphics, Vol. 35, #2,

May 2001, A Publication of ACM SIGGRAPH.

^ Work featured in Computer Graphics World and Resolution. Article covering the Truevision

Contest winners. (1991). Selected works also included in the Truevision 1992 calendar.

^^ Article covering the computer graphics research collaboration Art and Computer Science,

Northern Arizona University. Horizon Journal, pp. 24-30, 1990.

^ Caldwell, C. (1990) "Simulation as Animation, SISEA Proceedings (Second International

Symposium on Electronic Art. Groningen, Holland; pp. 38-56.

^ Gerken, J. E., Work included in Click - Book on Computer Graphics. Watson-Guptill (1990).

^ Caldwell, C. (1989) "Simulation as Animation," PIXIM 89, L'Image numerique a Paris -

Proceedings of the 2nd International Conference pp. 277-292.

^ Caldwell, C. (1989) In *World Graphic Design Now, Volume 6.* 2 full color pages in this

special volume on Computer Graphics. Tokyo:Japan. Kodansha Publishers.

^ Caldwell, C. (1988). "*Looking In*". In G. de Valois (Producer/Director),

Computer Dreams. [Video Tape]. Hollywood, CA: Digital Visions. (Documentary special on computer graphics for PBS, broadcast May 1989 .

^ Caldwell, C. (1989). Simulation as Animation in Computer Graphics,

National Computer Graphic Association '89 Conference Proceedings, Volume III.

^^ Caldwell, C. (1989). "Looking In". In M. Kusahara (Producer/Director),

COMPUTER GRAPHICS ANTHOLOGY. [Laser Disk] Tokyo: AMAYAKAN. (10-volume set of laser disks on computer graphics from North America, Europe, and Japan.)

^^ Caldwell, C. (1988). "*Collaboration*," ACM-SIGGRAPH '88 Tutorial Notes,

 Educators Workshop. (The creative and technical collaboration between computer scientists and artists.)

^ Caldwell, C. (1988)."Interaction Between Computer Science and Art in

Computer Graphics, "National Computer Graphic Association '88 Conference Proceedings, Volume III. pp. 653-663.

^ Caldwell, C. (1987). "Overlapping Images and Ideas, "IEEE Computer Graphics and

Applications, 7, (8), pp. 3-6. (4-page article on Craig Caldwell’s computer graphics/animation)

^ Caldwell, C. (1987). Edited by B. E. Brown in "SIGGRAPH '87 Technical

 Slide Set, "Computer Graphics, 21, (5), p. 289.

^ Caldwell, C. (1987). Edited by J. P. Culver and B. E. Brown in "SIGGRAPH

'87 Art Show Slide Set," Computer Graphics, 21, (5), p. 290.

^ Caldwell, C. (1987). Visual Works, PIXEL, 56, (5), pp. 38-39. (2-page color layout)

^ Caldwell, C. (1987). Cover of PIXEL magazine. (Japanese Computer

Graphics Magazine) April 1987, No. 55.

^ Caldwell, C. (1985). Computer Graphic Concepts and Techniques for Artists and Designers.

National Computer Graphic Association '85 Conference Proceedings, Volume I, pp. 393-413.

^ Wagner, P. and Caldwell, C. (1984). Digital Portfolio (Visual Work by

Caldwell) Computer Graphics World, 7, (9), 62-63.

Grants and Fund Raising:

• SXSW Conference ($1500) 2018

• Patient Empowerment app. Funded by Department of Pediatrics, University of Utah Health Sciences ($135,000) 2011-2014.

• NSF Foundation RFP 10-571 Tangible Simulations (HCC: Tangible simulations;

generalized haptic interfaces for interpreting, exploring and guiding complex computer

simulations. ($499,167). Investigators –David Johnson, Craig Caldwell, Stacy Morris).

GESNA Submission 20110225-103-487 (Not-funded) Dec. 2010

• Queensland Business Initiative Grant for New Motion Capture – April 2009

Queensland New Business initiative, Australia ($422,000) In conjunction

with Sega-Australia for Motion Capture Studio

• Hanson Film Institute, University of Arizona. Funded through a bequeath of $8million from

Vivian Hanson to the School of Media Arts. 2003

• New Learning Environments Technologies Grant, University of Arizona for

 investigation of the distribution of temporal media ($6,010) 2003

• UofA Office of Research- $50,000 support for College of Fine Art, New Media Center ‘97-‘98.

• UofA ICAC Computing Facilities for Fine Art Instruction - $35,000 (‘97) and match for

College of Fine Arts computing labs.

• Softimage – Two Full 3D Software Packages (96-97). (approx. $21,000)

• Media100 Digital Video- $30,000 partnership grant with the CCIT (‘96).

 Worked with CCIT as one of the faculty sponsors.

• CCIT Faculty Development Center - Two SGI computers- $38,000 3D animation (‘96).

• Plug & Play ICAC Grant - $26,000 Grant to set up new lab for students to bring computers

where they can hook up to the Internet, record animations, etc. Wrote grant.

• ALIAS - 3D Software Packages for SGI machine in CCIT (‘95)

 $10,500 grant for software for 2 years.

• UofA Core Curriculum Grant - $3,000. Develop new course in visual communication for the

core curriculum.

• Faculty Development Grant - $5,800 Develop visual communication materials for

multimedia authors at the university level as we go from a print to a visual culture.

• UofA ICAC Computing Facilities for Fine Art Instruction - $46,000 and matching from

college for total of $71,000 awarded.

• New Media Center Grant – USA New Media Center designation. (1995) UofA selected as

 national center that to become leaders in developing new media for education.

$330,000. Industry Hardware/Software Consortium (i.e. Adobe, Apple etc.)

• NAU Academic Computing Services - 1994 - $110,000 Multi-Media Lab for College of

Creative Arts,

• NAU Research Grant - 1994-95 - $16,500 Computer visualizations

• NAU Academic Computing Services - 1993 - $16,000 Multi-media equipment for department’s

efforts in designing interactive teaching applications.

• NAU Organized Research Grant – 1991 & 92 - $11.900

• Instrumentation and Laboratory Improvement Program, NSF - 1992-95 - $158,000. In collaboration

with the computer science department.

• Apple Computer "Classroom to Boardroom" Grant. November 1989 - $900.

• NAU Organized Research Grant - 1990 - $5,800

• Commodore Business Machines - 1990 - $36,090 matching for a 20 station Amiga 2500 (68030) Interdisciplinary College of the Arts Computer Laboratory

• Neo-Visuals 3D Animation Software (SAS) (1990 - 1993) - Value $36,000.

• Interdisciplinary College of Creative and Communication Arts Lab - 1989-90 - NAU

Academic Computer Steering Committee and Academic funding - $70,000 for peripherals and software for Amigas (i.e. digitizers, tablets etc.)

• Matching $100,000 for Instrumentation and Laboratory Improvement for NAU Visualization

Lab/Studio - 1989 - Funded by NAU Academic Computer Steering Committee. (2 SGI Iris workstations, WAVEFRONT software, 2D digitizers, 3D digitizer, TIPS, RIO, VISTA, QCRZ film recorder, SONY Laser disc recorder, SONY BVU-950, video controllers etc.)

• Instrumentation and Laboratory Improvement Program, National Science Foundation - (1989-

1992) - $200,000, Grant # USE - 8952059 Initiated grant, Co-principle investigator.

• NAU Organized Research Grant - 1989 - $5,300

• Organized Research Grant - NAU Summer 1988 - $5,400

• NAU Organized Research Grant - 1988 - $15,000 (For single frame video tape recorder and

controller boards for computer animation and simulation output)

• ACM-SIGGRAPH'87 Education Grant - $1,000 (2 days courses, technical sessions, workshop on

teaching computer graphics, video reviews, slide sets, full set course notes)

• National Endowment for the Arts - New Genres Visual Artists Fellowships - 1987 - $15,000

• Arizona Artists Materials Project Phoenix Art Museum - 1987 - $1,000

• Organized Research Grant - NAU Summer 1986 - $9,000

Honors:

2022

* Judge The Bench to Bedside Competition. Competition ntroduces students to the world of medical and global health form into multidisciplinary start-up companies as they identify unmet clinical needs. March 2022 <https://uofuhealth.utah.edu/center-for-medical-innovation/transform/bench-to-bedside>
* Judge for Shanghai International "Design 100+", launched by UNESCO Creative City. (Shanghai) Sept 2022
* Nominated for the University of Utah Distinguished Teaching Award. The University Distinguished Teaching Award honors significant contributions to the teaching mission of the University of Utah. 9/23/2020
* Judge, The Bench to Bedside Competition 9/14/2020
* Judge, Bengaluru GAFX 2017 Conference, Story Competition. 5/13/2017
* Jury Member – SIGGRAPH-Asia 2014, International Computer Animation Festival Committee.

2½ day jury selection conducted in Shanghai, China. <http://sa2014.siggraph.org/en/submitters-computer-animation-festival/computer-animation-festival-committee.html>

* Judge for the Second CCG DeTao Animation Design Competition awarded at the Ninth China International Comics and Games Expo (CCG Expo), Shanghai Convention Center.7/12/2013. <http://www.detaoma.net/news/show/1154666>
* Judge for Festival Interncional de Animacion, Mundos Digitales, A Coruna Spain <http://www.mundosdigitales.org/en/> (see visual support documents) 7/4/2013.
* *FMX: Forum for Innovation*. By invitation. Professionals from different disciplines

 work through complex issues for new solutions. Topic was “World Building” sponsored by 5D institute (<http://5dinstitute.org>). FMX-lab purpose was exchange of expertise for pushing world thinking into World Building; prototyping without breaking the design. Facilitated by Paul Tyler, “Handling Ideas”, using physical thinking tools taken from agile design and fast prototyping. Stuttgart, Germany. 4/23/2013.

* Judge for the 1st CCG DeTao Animation Design Competition at CCG Expo 2012. <http://www.detaoma.cn/Shanghai_CCG/> (see visual support documents) 7/14/2012.
* Judge for Festival Interncional de Animacion, Mundos Digitales, A Coruna Spain <http://www.mundosdigitales.org/en/> (see visual support documents) 7/3/2011.
* Beijing De Tao “*Master*” designation, Beijing, China. Nominated with a highly selective process from candidates worldwide. Masters were flown to Beijing for ceremony and to meet George Lee. <http://en.wikipedia.org/wiki/Beijing_DeTao_Masters_Academy> 6/20/2011.
* Judge for *Digital Media Concept to Company Contest*. <http://www.concepttocompany.org/media12> Utah’s premiere innovation initiative to select and support the best and brightest entrepreneurs. Winners receive over $40,000 in cash and professional services. Feb/March 2010
	+ - March 20-- Evaluate and screen applicants.
		- March 30- Presentations and judging of finalists held at Utah Valley University in Orem.
* Judge, BIFF *Brisbane International Film Festival*, Queensland New Filmmakers Awards, 2008.
* Judge, *Winter Park Art Festival* (3rd Largest Festival in USA), Winter Park Florida (‘97)

Professional Presentations/Conferences:

* Shanghai International Design 100+ WDCC World Design Cities Opening Ceremony Speaker. Riverside Huangpu Convention Center. Invited Talk, Sept. 2022.
* Shanghai Municipal Administration of Cultural Heritage. DeTao Dialogue with Global Innovation Masters Lecture Series. Presentation on "Story Development in Animation and its Cultural Heritage Influences". Shanghai Institute of Visual Art, Songjiang University Town, Shanghai, China. Nov. 2022
* Manga Productions, Riyadh, Saudi Arabia. Manga Productions, a subsidiary of the Mohammed bin Salman “Misk” Foundation. Title " Building and Pitching Stories" June 2022
* FMX 2022 27th Conference on Animation, Effects, Games and Transmedia. ‘Story Structure’ ‘Story Development’ May 2022, Stuttgart, Germany. Invited Talk.
* Mundos Digitales “Bringing Characters to Life” July 2022, A Coruna, Spain
* FMX 2021 26th Conference on Animation, Effects, Games and Transmedia. Story May 2021,

 Stuttgart, Germany. Invited Talk.

* SIGGRAPH Asia 2021, Tokyo, Japan, Conference Course. Course designation is highly selective.

 What we talk about when we talk about story. December 17, 2021. Referred.

* FMX 2019 24th Conference on Animation, Effects, Games and Transmedia. Story Structure April 2019,

 Stuttgart, Germany.

* Anima Festival 2019, Clínica: Story and Character in Animation (2 presentations (Part A & Part B, Oct 10 & 11) - InicioClínica: Story and Character in Animation Cuando los estudios dicen «¡se trata de la historia!, Cordoba, Argentina.
* CTNX (Creative Talent Network animation eXpo) Speaker.
* SIGGRAPH 2018, August 2018, Vancouver Canada, Story, it’s not just for writers… anymore.
* ComicCon International San Diego, The Magic, It's the Story Development, July 2018, San Diego, CA
* Mundos Digitales July 2018, A Coruna, Spain
* FMX 2018 23th Conference on Animation, Effects, Games and Transmedia. Story Development April 2018,

 Stuttgart, Germany.

* Animist April 2018, Istanbul, Turkey
* Beihang University, School of New Media and Design, Future Challenges for Animation in Games and VR,

 Beijing, China, May 4, 2018

* SXSW Mentor/Speaker March 2018, Austin, Texas
* Dialogue with Global Innovation Masters Lecture Series.. Lecture series at Shanghai Institute of Visual Arts,

Sonjiang University Town, Shanghai, China. 500 attendees. 03/28/2018.

* SI3 Seoul International Imagination Industry Conference & Forum 2017, Keynote and Presentation on Story

for Animators, Seoul, Korea.

* FMX 2017 22th Conference on Animation, Effects, Games and Transmedia. Bringing Stories to Life: It’s not just for writers… anymore, May 2017, Stuttgart, Germany.
* Bengaluru GAFX 2017 Conference, Story Structure and Development, Bangalore, India.
* Kre8tif! Conference & Content Festival 2017, It’s all about the story! Series 1: Story Structure for

Programmers, Designers, Animators & VFX Artists and It is about the story! - Series 2: Bringing Stories to Life for Programmers, Designers, Animators & VFX Artists. Invited Talk/Keynote, Kuala Lampur, Malaysia.

* SIGGRAPH 2016, Anaheim, CA, Conference Course. Course designation is highly selective.

 Story, it’s not just for writers… anymore. July 24, 2016. Referred.

* Mundos Digitales 2016, 13th Conference on Animation, VFX, Videogames and Digital Architecture,

Story Development. La Coruna, Spain July 18, 2016.

* FMX 2016 21th Conference on Animation, Effects, Games and Transmedia. Story Development,

April 24, 2016, Stuttgart, Germany.

* Bournemouth University, Nexus - Digital Media & Traditional Media, Poole, England. June 2015.
* University of Texas, Dallas, Convergence: Animation, Games & Communication, November, 2015.
* FMX 2015 20th Conference on Animation, Effects, Games and Transmedia. Bringing Stories to Life: It’s

not just for writers… anymore, May 2015, Stuttgart, Germany.

* SIGGRAPH 2015, Los Angeles, CA, Conference Course. Course designation is highly selective.

 Bringing Stories to Life. August 13, 2015. Referred.

- USTAR Confluence, Presentation on Digital Media Cluster advancements. 11/3-4/2014. Sorenson BioTech Center, University of Utah.

- SIGGRAPH ASIA 2014 Conference Course. Course designation is highly selective.

 Story Development for Animators and Game Developers 12/03/2014 Shenzhen, China, <http://sa2014.siggraph.org/en/attendees/courses.html> Referred

* DIGRA 2014 (Digital Games Research Association) Conference Planning Committee, Salt Lake City,

 Utah, August 3-6, 2014.

* [Mundos Digitales 2014](http://www.mundosdigitales.org/en/), 13th Conference on Animation, VFX, Videogames and Digital Architecture,

Story Development: Bringing Animated Stories to Life. La Coruna, Spain July 4, 2014.

* FDG 2014 (Foundation of Digital Games) Conference, Selection Committee, Ft. Lauderdale, Florida.

 April 3-7, 2014.

- Digital Medical Therapeutics: Exploring the power of video games and apps to transform disease treatment, health maintenance, and clinical training. Eccles Auditorium, Huntsman Cancer Institute. Invited talk on "Visual Design in Video Games... what makes it work!" University

of Utah. Invited Talk/Keynote, Presented, 10/28/2013.

- SIGGRAPH ASIA 2013 Conference Course. Course designation is highly selective.

 Story Content for Programmers, Game Designers, and Artists in Animation, VFX, and

Games. 10/20/2013 Hong Kong, <http://www.siggraph.org/asia2013/courses> Referred.

- SIGGRAPH 2013, Anaheim, CA, Conference Course. Course designation is highly selective.

 Story: It’s not just for writers… Anymore. July, 22 2013. Referred.

 <http://s2013.siggraph.org/attendees/courses/events/story-its-not-just-writers-anymore>

- Interactive Entertainment '2013, The Intersection of Video Games and Patient Empowerment: case study of a real world application. October 01 2013, Melbourne, VIC, Australia. Referred.

- CCG Expo 2013, The Ninth International Animation Game Expo. Arts Creative Day session,

DeTao Animation international masters media interview (CCN). Presenter at the CG DeTao Anime Context Awards Ceremony. Shanghai, China July 2013. Invited. <http://www.ccgexpo.cn>

* Mundos Digitales 2013, 12th Conference on Animation, VFX, Videogames and Digital Architecture,

It’s about Story… and AMAZING animation. La Coruna, Spain July 3, 2013.

* FMX 2013 18th Conference on Animation, Effects, Games and Transmedia. Non-Storytellers Story

 Session. Largest European conference in digital media. April 2013, Stuttgart, Germany.

- Sundance Film Festival 2013, TransMedia in the Video Games/Movies/Digital Media. Panel TBD, Session of top experts in the US and Canada. Sponsored by the Canadian Consulate. Jan. 23 2013

* SIGGRAPH ASIA 2012 Conference Course. Course designation is highly selective.

 Story Structure for Programmers, Game Designers, and Artists in Animation, VFX, and

Games. December 1, 2012, Singapore, http://www.siggraph.org/asia2012/courses

- Pixel7 2012, Austrian Conference on Computer Graphics & Animation. Story for Animation

and VFX. Austrian Academy of Sciences, Vienna, Austria. October 2012. <http://www.pixelvienna.com/7/>

* CCG Expo 2012, The Eighth International Animation Game Expo. The GREAT Animation Secrets

Arts Creative Day session, DeTao Animation international masters media interview (CCN).

Presenter at the CG DeTao Anime Context Awards Ceremony. Shanghai, China July 2012.

<http://www.ccgexpo.cn>

* Mundos Digitales 2012, 11th Conference on Animation, VFX, Videogames and Digital Architecture,

The Obvious Animation Secrets. La Coruna, Spain July 2012, <http://www.mundosdigitales.org>

* Zayed University, Refereed Speaker, *Art and Digital Media*, Dubai and Abu Dabbi,

 United Arab Emirates, , May 2012

* FMX 2012 17th Conference on Animation, Effects, Games and Transmedia. Story for Artists,

Designers, and Programmers. Largest European conference in digital media. Presentation ranked as one of the top sessions out of 362 speakers. Stuttgart, Germany. May 2012.

- Sundance Film Festival 2012, Utah's Video Game Industry Panel - *Leaders in the video game industry discuss what’s happening in Utah and its current status in the state. Panelists:* Craig Caldwell (University of Utah), Josh Jones (Smart Bomb Interactive), Lane Kiriyama (Wahoo Studios), Laura Mustard (Chair Entertainment – Epic Games), Donald Mustard (Chair Entertainment – Epic Games), John Blackburn (Disney), Veronica Lynn Harper (EA). January 2012

* Push Button Summit 2011, The Social Community Experience, Transforming 'Our' game to

 'Their' game, Oct 2011, <http://pushbuttonsummit.com/>

* Mundos Digitales 2011, 10th Conference on Animation, VFX, Videogames and Digital Architecture,

The GREAT Animation Secrets, La Coruna, Spain July 2011, http://www.mundosdigitales.org

* Presentation & Consultant – University of Central Florida, School of Visual Arts, June 2011
* University of Central Florida, Refereed Guest Speaker, *Interdisciplinary Art and Digital Media*,

Orlando, Florida, November 2010

* View Conference 2010, one of two academic speakers among industry professionals,

*Raising Animation to a Higher Level*, Torino, Italy, October 2010

[*http://www.viewconference.it/greg-caldwell*](http://www.viewconference.it/greg-caldwell)

* ASPERA 2010, *Professor as Executive Producer*, Sydney, Australia July 2010.
* SIGGRAPH ASIA 2008, *Creative versus Technical Skills in Computer*

*Animation*, Singapore, December 2008.

* CILECT Congress, *Teaching 3D animation: Creative versus Technical Skills*, Beijing, China

(CENTRE INTERNATIONAL DE LIAISON DES ECOLES DE CINEMA ET DE TELEVISION), The

 International Association of Film and Television Schools, November 2008.

* Digital Dialogues, National Media Education Conference (SAAME), *Digital Media Today* ,

Adelaide, Australia, Sept. 2008.

* Chair of SIGGRAPH 2008 Panel, *Teaching Computer Animation for Results*, Los Angeles, CA,

August 2008.

* University of New Mexico, Interdisciplinary Film and Digital Media Program,

 *The Nexus between Industry and Academia,* Albuquerque, NM, May 2008

* San Jose State University, Refereed presentation, *21st Century - Art Department 2.0*, San Jose, CA,

Feb. 2008

- Beijing Film Academy, Animation Division, “Animation Today” October 2007

 ^ Guest/Research Professor for Animated Feature Project, Jan/Feb 2008

- Shandong University of Art and Design, Jinan, China, September 2007

- Griffith 2015 Senior Leadership Conference, Gold Coast, AU – Compare and Contrast University Methodologies Australia and USA, July 13, 2007

- Lombardy/Queensland Symposium- Brisbane, AU on GFS, July 12, 2007

- ASPERA (Australian Screen Production Education and Research Association) Conference 2007,

Panel Session 2 **–** Industry and its impact on academic programs & content.June, 2007

- Animated Dialogues, Melbourne International Animation Festival Panel Discussion:

Animation: Re-packaged for the Future, June 2007

- Whistling Woods International Film School, Bollywood Studios, Insights from Industry,

Mumbai, India March 2007.

- Pixar University, Pixar Animation Studios, Emeryville, California, April 2004

Presentation: Non-Linear Animation: techniques and applications beyond film.

- Interdisciplinary Digital Media, Nanyang University, Singapore, March 2004

Integrating Digital Media into the University Curriculum (Consultant)

- Invited presentation on Digital Media at the College of New Jersey, Trenton, NJ, May 2003.

- Chair of the College Art Association 2003, New York City, conference session

 “Animation: Traditional Skills, New Tools and Applications” (Feb. 20, 2003)

The discipline of animation requires a diverse set of traditional artistic skills (e.g. drawing, design, cinematography, lighting, editing, storytelling etc.). These same sets of animation skills are rapidly becoming absorbed into new digital applications - web design, interactivity, games, and other multimedia forms. Ironically technology is expanding the demand for traditional conceptual skills.

- ISEA 2002 (11th International Symposium on Electronic Art), Nagoya Japan (October 30, 2002)

“Expanding the Boundaries: Designing New Media Interdisciplinary Curriculum”

- Chair of Panel Session SIGGRAPH 2001, “Teaching Computer Animation for Results”

- Keynote Speaker*,* 6th Annual UofA Learning Technology Showcase, *Looking to the Future* 2001

- College Art Association'01 conference panel member, session titled

 Pedagogy 4.0 is in Beta: Teaching in the New Media (Feb 2003).

- UofA, Speaker at the Dean's & Provost Retreat on Integration of Technology (96)

- Presentation on interactive learning and multimedia at IBM, Tucson.

- CONVERGENCE conference, Art, Culture and the National Information Infrastructure, Massachusetts

State House, Boston, Mass.

- Invited Presentation on my current work at the Advanced Computing Center for Art and Design

at Ohio State University, 1994.

- Chair of the College Art Association '91 conference session titled

*Computer Visualization - Working in 4D on the Z axis* (February 1991) The term Visualization challenges the commonly held separatism of scientist and artist; a new renaissance is being created; and new views of time (4D) and space (z axis) are being defined.

- Presentation on computer graphics at Carnegie Mellon University (1990) and San Francisco State University

(1991) on Computer Graphics/Animation.

- Chairman of session Technology of the 90's: New Tools for Visual Expression at the MACAA -

Mid-America College Art Association: 54th Conference in Tucson.

- Paper on "Simulation as a new Animation technique" SISEA, Second International Symposium

on Electronic Art. Groningen, Holland. (November 1990).

- Presented paper on "Simulation as Animation," at the PIXIM '89 Conference

 *L'Image numerique a Paris,* Paris, France (September 1989)

- Chairman of technical session at National Computer Graphics Association '89

 Conference. (April 1989) Topic: "*Pivotal Issues in Computer Animation*"

New ways of creating animation are being made possible through the integration of physically-based motion description techniques. The session delved into procedurally define motion, including kinematics and dynamics aimed at developing new creative possibilities for computer animation.

- Chairman of panel at National Computer Graphics Association ‘88 Conference on

 "*Cutting-Edge Animation*" March 1988. Symbiotic computer graphic environments have resulted in new creative works. This session covered three primary areas that contribute to innovative 3-D animation: the artistic environment, the research or programming environment and the production environment. Session recognized as in the top 5% of presentations.

Creative Work & Recognition:

**Entertainment Industry** – Walt Disney Film Studios, Feature Animation Division, Artist Development and Digital Production Solutions for *Dinosaur, Tarzan, Mulan;* Pre-Production *Atlantis, The Emperor’s New Groove, Treasure Planet.* Second stint at Disney worked closely with Leads in animation, layout, modeling, producing etc. for *“Chicken Little”2005 and “Meet the Robinsons” 2006; pre-production for “Bolt” 2008* and *“Tangled” 2010.*

**Video Games** - Electronic Arts, Tiburon Studio. Artist Training for the Games *“Superman* 2006*”, NFL Coach* 2007*, Madden* 2007*.* Executive Producer: *Robot Pinball Escape* 2012, *Erie* 2012, *Race of the Zodiac* 2013, *Last March of the Dodos* 2013, *Drop Drop* 2013…

**Selected Exhibitions, CG & Animation**, (Refereed and Invited) - International De Cinema De Animacao 98, Portugal; Transmedia ‘96, Berlin; Der Prix Ars Electronica ’92 & ’93, International Compendium of the Computer Arts, Linz, Austria; , 10th International Forum on New Images, Monte-Carlo; Truevision Videographics Contest, *First PlaceAward in Fine Arts and special Eagle Award*; Eurographics '91, Vienna Austria; SISEA, Second International Symposium of Electronic Art, Groningen, Netherlands; Computer Animation, Second CG Film Festival, Geneva, Switzerland; “Entertainment Tonight”, June 1989, "*Digital Vision*, New York, Metropolitan Museum of Art, New York; IBM Gallery of Science and Art collection; ACM SIGGRAPH Video Review (ISSUE 40/41) State of the Art Visualization; Electronic Art Museum at Universita Degli Studi Di Camerino, Camerino, Italy; MOMI, (Museum of the Moving Image), South Bank London, England; Images Du Futur, Montreal, Quebec, Canada; Arizona Biennial, Tucson Museum of Art; ArtExpo Los Angeles Convention Center, LA, CA.; NYChapter/ACM Siggraph Film and Video Show; PIXIM Film and Video Show, Image Numerique a Paris, sponsored by ACM SIGGRAPH France, La Villette, Paris, France; FISE Arizona Biennial Arizona Biennial IMAGINA A, Centrum voor Kunst, Media Technologie (Center for Art, Media and Technology), Utrecht Academy of Arts Utrecht, The Netherlands; F.A.U.S.T., Forum Des Arts De L'Univers Scienctifique Et Technique, Toulouse, France; Ausgraph, Sydney, Australia; SIGGRAPH International traveling Arts show; PRIX PIXEL - I.N.A., Institut National De L'Audiovisuel, 7th International Forum on New Images; IMAGINA, Monte-Carlo; Technical Award, Audio Visual Age(AVA) Nicograph; *3-2-1 Contact*, Children's Television Workshop, 1987. (Advances in computer graphic research); PRIX ARS ELECTRONICA, Computerkultur Tage Linz. Austria; Images featured at SIGGRAPH ’87 (Traveling Art Show, Conference Literature, Technical Slide Set, Special Image set); Arizona Electronic Images '87; Cad/Cam International, Kortrijk, Belgium; Arizona Biennial, Tucson Museum of Art, Tucson; Silicon Desert Graphex, Phoenix, AZ, IMAGINA, 6th International Forum, Monte Carlo, Electronic Images ’87 (Arizona Commission on the Arts) Scottsdale CC, Scottsdale, AZ; Tempe Art Center, Tempe, AZ; Krakas & Dyer, Phoenix, AZ, Tubac Center for the Arts, Tubac, AZ ; DIGICON '85 at the Burnaby Art Gallery in British Columbia, Canada. This exhibit sponsored by DIGICON (The International Arts Conference on Computers and Creativity)

**Selected Exhibitions, Painting and Drawings**: selected for over 150 national and international art competitive and invited exhibitions. Los Angeles Designers Conference, Cal State L.A., Clearwater Drawing Invitational, Phyllis Wilson Gallery, Chatanooga, TN, Joan Lind Gallery, Gainesville, FL., Provincetown Art Association and Museum Competition '84, Provincetown, MA., Coconino Center for the Arts, 1984, Flagstaff, AZ, Images in Art, Winter Park, FL. (1983), Las Ola s Festival of Art, Ft. Lauderdale, FL. (1983), Key Biscayne Art Festival, Key Biscayne, FL. (1983), Carrolwood Art Festival, Tampa, FL. (1983), Festival of the Masters, Disney World Gallery, Merit Award (1983); Winter Park Art Festival, Winter Park, FL. (1983), Arts Council of Great Britain, International Biennial Drawing Exhibition Tour: (Birmingham, London, Edinburgh, Glasgow, Belfast, Limerick, American Drawings II tour schedule for 1981: Washington County Museum, Hagerstown, MD, University of Sherbrook, Sherbrook, Quebec, City of Portsmouth Arts Center, Portsmouth, VA.; International Biennial Drawing Exhibition, Cleveland County Museum, Great Britain (1981); Arizona Summer Invitational, Flagstaff Art Center, Flagstaff, AZ (1981). Faculty Art Show, NAU Art Gallery, Flagstaff, AZ. (1981); American Drawings II tour schedule for 1980: Kirkland Gallery, Decatur, IL; Art Gallery, Slippery Rock, PA, Hewlett Gallery, Pittsburgh, PA, University Art Gallery, SUNY, Albany, NY, University of Southern Colorado, Pueblo, CO, Museum of Texas Technical Design, Lubbock, TX; 14th annual Yuma Fine Arts Association Show, Yuma, AZ; Portsmouth Arts Center, Portsmouth, VI; Works on Paper National: Southwest tour schedule 1981: Warehouse Living Arts Center, Corsica, TX, Roswell Museum and Art Center, Roswell, NM; Beaumont Art Museum, Beaumont, TX; Amarillo Art Center, Amarillo, TX; The Art Center, Waco, TX; Witte Memorial Museum San Antonio Museum Association, San Antonio, TX; Tyler Museum of Art, Tyler, TX; American Drawings II tour schedule for 1979 (Smithsonian Institution Traveling Exhibition): Commons Gallery, University Park, PA; Tweed Museum of Art, Deluth, MN; Clara M. Eagle Gallery, Murray, KY; Kennedy-Douglas Center for the Arts, Florence, AL; Stifel Fine Arts Center, Wheeling, WV; Mural 8' x 121', Commissioned by Stephen Decatur High School, Decatur, IL; Portrait of Northern Arizona University President Lawrence Walkup, Commissioned by Arizona Board of Regents and First Interstate Bank, Northern Arizona University, Flagstaff, AZ; Yuma Invitational and Tour, Yuma Fine Arts Association, Yuma, AZ. Permanent Collection Yuma Fine Arts Association, Yuma, AZ;