Midori Kitagawa, Ph.D.
School of Arts and Humanities
Arts and Technology Program
Feb 14th, 2013

Educational History:

Post-doc   1993-1994   Texas A&M University, College Station, Texas

Ph.D.   1993   Texas A&M University, College Station, Texas
   Major: Architecture (Emphasis: Visualization Sciences)
   Dissertation title: Boolean Operations on Polygon Meshes
   Dissertation advisor: Thomas Linehan

M.A.   1989   The Ohio State University, Columbus, Ohio
   Major: Art Education (Emphasis: Computer Graphics & Animation)
   Thesis title: Branching Object Generation for Computer Graphics and Animation
   Thesis advisor: Thomas Linehan

B.F.A.   1986   Joshibi University of Art and Design, Tokyo, Japan
   Major: Painting

Employment History – principal positions since the Bachelor's degree:

Associate Professor   2004 - Current
   School of Arts and Humanities, Arts and Technology (ATEC) Program
   The University of Texas at Dallas, Richardson, Texas

Associate Professor   2001 - 2004
   Advanced Computing Center for the Arts and Design
   Department of Art
   Department of Industrial, Interior, and Visual Communication Design
   The Ohio State University

Assistant Professor   1994 - 2001
   Advanced Computing Center for the Arts and Design
   Department of Art
   Department of Industrial, Interior, and Visual Communication Design
   The Ohio State University

Post-doctoral Research Associate/Visiting Lecturer 1993 - 1994
   Visualization Laboratory, Texas A&M University

Programmer   1986 - 1987
   Computer Imaging and Design Inc., Tokyo, Japan

Employment History – concurrent temporary or visiting appointments, consultantships:

<u>Visiting Lecturer</u>   1993 - 1994
>   Visualization Laboratory, Texas A&M University

Professional recognitions and honors (study, teaching, research, service):

The Hollywood Reporter[1] selected and interviewed Professor Kitagawa as one of the ten
>   professors who mentor Hollywood's next generation of artists.   The interview article was
>   written by Thomas McLean, online editor of *Animation Magazine*, and published on August
>   20th, 2010.

Joshibi University of Art and Design[2] selected Professor Kitagawa as one of the two most
>   influential alumni.   Prof. Kitagawa spoke at the ceremony to commemorate the centennial
>   of the university's founding.   The ceremony was held in Tokyo in October 2000 and
>   attended by five thousand guests.

Professional memberships:

Association for Computing Machinery (ACM) Special Interest Group on Computer Graphics
>   and Interactive Techniques (SIGGRAPH)[3] 1987 - current.

Achievements in original investigation:

Book co-authored:

Midori Kitagawa and Brian Windsor. *MoCap for Artists: Workflow and Techniques for Motion
>   Capture.* Burlington, MA/Oxford UK: Focal Press/Elsevier, 2008.

Juried exhibition entry:

"Expanding Media Art: gleaming, moving, feeling, playing," Joshibi Art Museum, Tokyo,
>   Japan, 2007.

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[1] The Hollywood Reporter is one of the two major trade publications of the entertainment industry, the other being Variety. The Hollywood Reporter is published daily and weekly.

[2] Joshibi University of Art and Design, formerly the Women's College of Fine Arts, in Tokyo, Japan, was established with an accreditation by the Japanese Government in 1900.   Joshibi is the second oldest art school in Japan, next to Tokyo University of the Arts, which used to admit no female students.

[3] Since 1974 ACM SIGGRAPH has been convening the SIGGRAPH Annual Conference, attended by tens of thousands of professionals.   SIGGRAPH Annual Conferences have been the most prestigious place to publish research papers in computer graphics and interactive technologies and 3D computer animations.

Refereed talks/presentations to professional meetings and seminar or colloquia assemblies:

Rise and fall of 2D animation: Miyazaki animation vs. Disney animation, the International Conference on Asian Comics, Animations, and Gaming, York University, Toronto, Canada, 2006.

What has happened to 2D animation? Contrasting Anime to Disney, The18[th] Annual Society for Animation Studies Conference, Trinity University, San Antonio, Texas, 2006.

Invited talks/presentations to professional meetings and seminar or colloquia assemblies:

Introduction to 3D Computer Animation, Monterrey, Mexico, Technologico de Moneterrey, 2009.

Making a ball bounce, Monterrey, Mexico, Technologico de Moneterrey, 2009.

Capturing movements: What motion capture reveals, Science Café Kobe (seminar series sponsored by Kobe University), Kobe, Japan, 2008.

Can traditional feature animation survive in the digital age?: Rise and fall of 2D animation in US and Japan, TexGraph 2006, Texas A&M University, College Station, Texas, 2006.

3D Computer Animation Education in the U.S., Computer Graphics Arts Society & Visual Communications Journal Joint Seminar, Boston, Massachusetts, 2006.

Contributed panel discussions at professional meetings:

Future of Digital Imaging, Quarterly Research & New Venture Showcase: Virtual Worlds, Simulation & Game Technology, University of Texas at Dallas, Dallas, Texas, 2007.

Teaching Animation: At the Crossroads of Production and Studies, the 18th Annual Society for Animation Studies Conference: Animation at the Crossroads", Trinity University, San Antonio, Texas, 2006.

External funding for original investigations:

Proposals submitted:

Multisensory Creative Learning Environment for High School Geometry, PI: Midori Kitagawa, National Science Foundation: Transforming Education, $549,288. Pending.

As the PI, I led a team of faculty members from various disciplines (ATEC, Computer Science, Mathematics and STEM Education and Research) to develop a project proposal for

teaching geometry by taking advantage of the multisensory stimuli and immersive nature of a virtual reality environment.

Multi-Scale Integrated Intelligent Interactive Sensing (MINTS) for Environmental Hazard and Risk Assessment, PI: Georgia Fotopoulos, Co-PI Midori Kitagawa, National Science Foundation, $3,295,177. Declined.

As a Co-PI, I was in charge of the dissemination research thrust that catalyzes creative thinking and approaches to effective communication among various types of individuals, organizations and communities from the pre-crisis prevention phase to the post-crisis evaluation phase of an environmentally hazardous event.   Also I was responsible for developing an international research collaboration plan with Kyoto University.   We are planning to reply in 2013.

Center for Offshore Wind Energy (Engineering Research Center), PI: Su Su Wang (University of Houston, Mechanical Engineering Department), National Science Foundation, March 2011 – February 2016 (2021 if renewed), $18,490,817.00.   (University of Texas at Dallas's portion will be $2,685,013.00 NSF funds, excluding cost sharing.). Declined.

Aiding Detection and Intervention of Certain Behavioral Disorders in Children (Integrative Graduate Education and Research), PI: Balakrishnan Prabhakaran (UTD, Computer Science Department), National Science Foundation. Declined.

Earth Atmosphere Visualization, PI: Rod Heelis (UTD, Center for Space Sciences Director), National Science Foundation. Declined.

The anticipatory profile (Human and Social Dynamics), PI: Mihai Nadin, National Science Foundation, $698,000.00. Declined.

Grants/contracts awarded:

Conversational Character Robot, PI: Midori Kitagawa, Hanson Robotics, 2007-2008, $24,825.00.

Industry support:

RenderMan[4] software donation from Pixar, 2004 - current

Received a donation of 80 licenses of RenderMan and six other related products (80 licenses each) from Pixar.   The cost to purchase the licenses would have been $110,000

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[4] Pixar's Renderman is a tool set to develop textures and lighting for 3D computer generated environments. It is widely used in the computer animation and game industries.   It is an excellent tool for students to understand the fundamentals of 3D computer graphics, especially lighting and texturing.   It allows students to develop their own tools customized to suit individual needs in creative activities.

with educational discount ($440,000 without educational discount).   The licenses are renewed annually and upgraded whenever new versions are released free of charge.

Houdini[5] software donation from Side Effects, Inc., 2005 – current

Received a donation of 40 licenses of Houdini Master and 120 licenses of Renderer, at least $680,000 worth of software donation from Side Effects, Inc.   The licenses are renewed annually and upgraded whenever new versions are released free of charge.

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[5] Most ATEC courses in 3D computer animation have been taught using Autodesk's Maya.   While Maya is currently probably the best commercial application for character animation, Side Effects, Inc.'s Houdini is known for its strength in special effects, such as clouds, smokes, explosions, rain, and waves.

TEACHING

Doctoral advisement/direction:

Dissertation committee chair for:

Weiwei Zhang	Arts and Technology	expected in 2014
Christine Lanning	Arts and Technology	expected in 2014
Vanessa Paugh	School of Arts and Humanities	2009

    Dissertation title: Hyperdoll Theory of Artificial Personality for Non-player Characters in Computer games.

Dissertation committee member for:

Jeff Senita	Arts and Technology	expected in 2013
Garman Herigstad	School of Arts and Humanities	
Tuan Ho	School of Arts and Humanities	
Chih-Yuau (Jason) Huang	School of Arts and Humanities	2011
Robert Flowers	School of Arts and Humanities	2010
Marge Zielke	School of Arts and Humanities	2007
Hui Li	School of Engineering and Computer Science	2006

Masters advisement/direction:

Ricardo Orellana	Arts and Technology	M.F.A.	2011
Philip Carr	Arts and Technology	M.F.A.	2009
Christine Lanning	Arts and Technology	M.F.A.	2009
June Chi	Arts and Technology	M.F.A.	2009
Singkham Khamnouane	Arts and Technology	M.F.A.	2009
Weiwei Zhang	Arts and Technology	M.F.A.	2008
Joel Ladella	Arts and Technology	M.F.A.	2008
William Patrick Dunnigan	Arts and Technology	M.F.A.	2007
Ming Ku	Arts and Technology	M.A.	2006
Chih-Yuau Huang	Arts and Technology	M.A.	2006
Harold Leach	Arts and Technology	M.A.	2005

Classroom teaching:

Semester	Prefix	Number	Course Name
Fall 2004	ATEC	3317-001	Intro to 3D animation
	HUAS	6393-501	Time Based Art: Animation Production
Sp 2005	ATEC	4380-080	Capstone Project
	ATEC	6351-001	Motion Capture
	ATEC	8303-080	Ind Readings in ATEC
	ATEC	3327-001	Intermediate 3D
Su 2005	ATEC	4337-001	Adv 3D Animation
	ATEC	4380-580	Capstone Project
	ATEC	8303-580	Ind Readings in ATEC
	ATEC	8303-080	Ind Readings in ATEC
	ATEC	8303-08M	Ind Readings in ATEC
	ATEC	8305-580	Ind Research in ATEC
Fall 2005	ATEC	4337-001	Adv 3D Animation
	ATEC	7V81-080	Advanced Project
	ATEC	4380-580	Capstone Project
	ATEC	6351-001	Motion Capture
	ATEC	8303-080	Ind Readings in ATEC
	ATEC	8305-080	Ind Research in ATEC
	ATEC	4V71-080	Ind Study in ATEC
Sp 2006	ATEC	4380.080	Capstone Project
	ATEC	6351.501	Motion Capture
	ATEC	8303.080	Ind Readings in ATEC
	ATEC	8305.080	Ind Research in ATEC
Su 2006	ATEC	3327.021	Lighting/Texturing
	ATEC	4337.021	3D Animation
	ATEC	4380.580	Capstone Project
	ATEC	8303.580	Ind Readings in ATEC
Fall 2006	ATEC	4337.001	3D Animation
	ATEC	7V81.080	Advanced Project
	ATEC	4380.080	Capstone Project
	ATEC	6351.001	Motion Capture
	ATEC	8303.080	Ind Readings in ATEC
	ATEC	8305.080	Ind Research in ATEC
	ATEC	4V71.080	Ind Study in ATEC

Sp 2007	ATEC 4337.001	3D Animation
	ATEC 4V71.080	Ind Study in ATEC
	ATEC 4380.080	Capstone Project
	ATEC 6351.501	Motion Capture
	ATEC 7V81.080	Advanced Project
	ATEC 8303.080	Ind Readings in ATEC
	ATEC 8305.080	Ind Research in ATEC
Su 2007	ATEC 6331.56A	Aesthetics of Interactive
	ATEC 4380.080	Capstone Project
	ATEC 8305.080	Ind Research in ATEC
	ATEC 8303.580	Ind Readings in ATEC
Fall 2007	ATEC 4370.002	Motion Capture
	ATEC 4V71.080	Ind Study in ATEC
	ATEC 8303.080	Ind Readings in ATEC
	ATEC 8305.080	Ind Research in ATEC
Spring 2008	ATEC 4337.001	Computer Animation
	ATEC 4370.001	Topics in ATEC: Motion Capture
	ATEC 4V71.080	Ind Study in ATEC
	ATEC 6351.001	Digital Arts
	ATEC 8303.080	Ind Readings in ATEC
	ATEC 8305.080	Ind Research in ATEC
Fall 2008	ATEC 4337.001	Computer Animation
	ATEC 4345.001	Motion Capture Animation
	ATEC 6351.001	Digital Arts
	ATEC 8303.080	Ind Readings in ATEC
	HUMA 8V99.080	Dissertation
Spring 2009	ATEC 4337.001	Computer Animation
	ATEC 4345.001	Motion Capture Animation
	ATEC 4V71.080	Ind Study in ATEC
	ATEC 8303.080	Ind Readings in ATEC
	HUMA 8V99.080	Dissertation
Fall 2009	ATEC 4337.001	Computer Animation
	ATEC 6351.001	Motion Capture
	ATEC 8303.080	Ind Readings in ATEC
	HUMA 8V99.080	Dissertation
Spring 2010	ATEC 4337.001	Computer Animation
	ATEC 4345.001	Motion Capture Animation

	ATEC	8303.080	Ind Readings in ATEC
	ATEC	8305.080	Ind Research in ATEC
Su 2010	ATEC	4337.05A	Computer Animation
	ATEC	4370.05A	Topics in ATEC: Experimental Mocap
	ATEC	8303.080	Ind Readings in ATEC
Fall 2010	ATEC	4337.001	Computer Animation
	ATEC	4380.080	Capstone Project
	ATEC	6352.001	Motion Capture
	ATEC	6397.080	Ind Readings in ATEC
	ATEC	6398.080	Ind Research in ATEC
	ATEC	8303.080	Ind Readings in ATEC
Spring 2011	ATEC	4337.001	Computer Animation
	ATEC	4345.001	Motion Capture
	ATEC	4V80.080	Capstone Project
	ATEC	6398.080	Ind Research in ATEC
	ATEC	8305.080	Ind Research in ATEC
Summer 2011	ATEC	4337.05A	Computer Animation
Fall 2011	ATEC	4337.001	Computer Animation
	ATEC	4V80.080	Capstone Project
	ATEC	4V71.080	Ind Study in ATEC
	ATEC	6352.001	Motion Capture
	ATEC	6398.080	Ind Research in ATEC
	ATEC	8305.080	Ind Research in ATEC
Spring 2012	ATEC	4V80.080	Capstone Project
	ATEC	6355.013	Animation Prod Lab
	ATEC	6397.080	Ind Reading in ATEC
Summer 2012	ATEC	4345.OU1	Motion Capture Animation
	ATEC	6398.080	Ind Research in ATEC
Fall 2012	ATEC	4V80.080	Capstone Project
	ATEC	4V71.080	Ind Study in ATEC
	ATEC	6352.001	Motion Capture
	ATEC	6398.080	Ind Research in ATEC
	ATEC	8305.080	Ind Research in ATEC

SERVICE

Departmental administrative duties:

SACS coordinator for the ATEC and EMAC programs, 2011 – current.
    In charge of the program assessments for the ATEC degrees (B.A., M.A., M.F.A., and
    Ph.D.) and EMAC degrees (B.A. and M.A.)

SACS coordinator for the ATEC program, 2006 - 2008.
    The following SACS documents were prepared by Prof. Kitagawa for the ATEC program:

- Faculty Roster: Qualifications of ATEC full-time and part-time faculty
- Learning objectives of all ATEC courses
- 2006 Program Assessment Plans for ATEC BA, MA, and MFA
- 2006 Program Assessment Reports ATEC BA, MA, and MFA
- 2007 Program Assessment Plans for ATEC BA, MA, and MFA
- 2007 Program Assessment Reports ATEC BA, MA, and MFA
- ATEC senior exit survey
- ATEC graduating students exit survey
- Self-study reports on ATEC MA and MFA

Animation curriculum coordinator, 2004 - 2011

ATEC course schedule coordinator, 2005 - 2007

School committees:

<u>Chaired:</u>

Ad Hoc Committee for 3rd Year Review of Prof. Petrovic, 2012 - 2013

Ad Hoc Committee for 3rd Year Review of Prof. Farrar, 2011 - 2012

Ad Hoc Committee for 3rd Year Review of Prof. Todd Fechter, 2009 - 2010

<u>Served on as a member:</u>

Ad Hoc Committee for 6th Year Review of Prof. Fecther, 2012 - 13

Ad Hoc Committee for 6th Year Review of Prof. Evans, 2021 - 13

Search Committee for 3D animation position in ATEC, 2011 - 12

Ad Hoc Committee for 6th Year Review of Prof. DuFour, 2011 - 12

Faculty Personnel Review Committee, 2011 – 12

Search Committee for 3D animation position in ATEC, 2011 - 12

Arts and Technology Faculty Advisory Committee, 2004 - current

Advisory Committee for the School of Arts and Humanities / the Erik Jonsson School of
Engineering and Computer Science Motion Capture Laboratory, 2004 - current

Ad Hoc Committee for 3rd Year Review of Prof. Marjorie A. Zielke, 2010

Ad Hoc Committee for 3rd Year Review of Prof. Monica Evans, 2009

Faculty Personnel Review Committee 2007 - 2008

EMAC Search Committee, 2008 - 2009

Art History Search Committee, 2008

Ad Hoc Committee for Granting Tenure and Promotion to the Rank of Associate Professor for
Dean Terry 2006 - 2007

Graduate Studies Committee, 2005 - 2008

Ad Hoc Committee for Mid-Probationary Review for Venus Reese 2005

University committees:

Student Grievance Officer, 2009 - 2011

SACS Academic Assessment Committee, 2006 - 2008

Campus Facilities Committee, 2006 - 2009

Institute of Innovation & Entrepreneurship, Executive Committee, 2006 - 2007

Distance Learning Committee, 2005 – 2006

Special service contributions to program, school, or university:

Guest lecture organizer, 2005 – 2011.   The guest lecturers whom I invited to UTD include the
following professionals:
Brian Windsor (Motion capture specialist, The Ohio State University)
Robert Lurye (Lead lighter, DreamWorks/PDI)

Dr. Elisabeth Rega (Associate Professor of Anatomy, Western University of Health Sciences)
Dr. Stuart Sumida (Professor of Biology, California State University at San Bernardino)
Tim McLaughlin (Chair, Visualization Science Department, Texas A&M University)
Dr. Scott King (Professor of Computer Science, Texas A&M University, Corpus Christi)
Crispin Freeman (Actor/Voice Actor)
Ken Maruyama (Vice President, Sony Pictures Imageworks)

Supervised Dr. Jo Takayama, visiting researcher in ATEC program, 2007 - 2009.
The animations Dr. Takayama produced at UTD have been screened at international conferences and exhibitions, such as ACM SIGGRAPH Asia in Singapore, 5th Istanbul Animation Festival in Turkey, and ASIAGRAPH 2008 in Japan, contributing to the ATEC program's international recognition.

Showcase organizer, 2006.   Organized the first ATEC Showcase, a juried exhibition of animations, films, games, images, sounds, and interactive arts by ATEC graduate and undergraduate students.

Faculty advisor to the Student Animation Society, 2005 – 2007

Service outside the university:

Paper reviewer, Leonardo: Journal of Arts, Sciences and Technology, 2006 – current

Member, Media Forum Advisory Committee. Media Forum is a non-profit organization whose goal is to develop academic and professional opportunities in the digital content industry, 2003 – current

Jury member, SIGGRAPH 2010 Space Time Student Competition, 2010

Jury member, SIGGRAPH Asia 2009 Best Education Papers. Selected papers have been published in *Computers and Graphics: An International Journal of Systems & Applications in Computer Graphics*, Elsevier, 2010

Reviewer, book proposal for CRC Press - Chapman Hall, 2010

Jury member, SIGGARPH Asia 2009 Educators Program. Reviewed and selected paper, panel, and workshop proposals, 2009

Reviewer, book proposal for Focal Press, 2009

ACM SIGGRAPH Japanese Liaison. Worked with the SIGGRAPH Executive Committee and Conference Committees to develop inter-organizational relations and activities, 1994 - 2007

Reviewer, SIGGRAPH 2007 Sketches and Posters, 2007

Reviewer, SIGGRAPH 2006 Art Gallery, 2006

Reviewer, SIGGRAPH 2005 Courses, 2005