Tim McLaughlin, Associate Professor and Department Head
Department of Visualization, College of Architecture, Texas A&M University

Curriculum Vitae

I. Personal Information

Full Name Timothy David McLaughlin

Title Associate Professor and Department Head,
Department of Visualization, College of Architecture, Texas A&M University

Education

- Master of Science in Visualization Sciences, Texas A&M University, 1994
- Bachelor of Environmental Design, Texas A&M University, 1990
- Associate of Arts, Kilgore College, 1987

Teaching and Administrative Experience

- 2008-present: Associate Professor and Department Head, Department of Visualization, College of Architecture, Texas A&M University, College Station, Texas
- 2007-2008: Chair of Visualization Faculty and Associate Professor, Department of Architecture, Texas A&M University
- Spring 2000: Visiting Professor, The Media School, Bournemouth University, Bournemouth, England

Professional Experience

- 2006-2007: Front End Supervisor, Lucasfilm Animation, Nicasio, California
- 1994-2006: Various positions including Associate Visual Effects Supervisor, Creature Supervisor, Creature Technical Director, and Technical Director at Industrial Light & Magic, San Francisco and San Rafael, California
- 1990-1991: Draftsman, HKS, Inc. Dallas, Texas
- 1990: Draftsman, Cunningham Architects, Dallas, Texas

Memberships

- Current Member, Association for Computing Machinery (ACM)
- Current Member, ACM – SIGGRAPH
- Current Member, College Art Association (CAA)
- Current Member, International Game Developers Association (IGDA)
- Current Board Member, Visual Effects Society (VES)

II. Research and Creative Activities

Note: In the following sections, "*" denotes graduate students in the Department of Visualization, "**" denotes graduate students in other academic departments.

Research Area: Creative Collaboration Among Distributed Teams

A. Conference Paper Presentations
   1. McLaughlin, T. and Keske*, S. 2012. "Evaluation of Students' Skills in Remote Collaboration for Creative Problem Solving in Computer Graphics," In Proceedings of Eurographics, to be held May 13 – 18, 2012. Sardinia, Italy. Acceptance rate:
   2. McLaughlin, T., Fechter, T., Pasing, A. M., Pena*, B. A., Reitz, J., and Vidal, J. A. 2010. "Multi-Institutional Collaboration in Delivery of Team-Project-Based Computer Graphics Studio Courses," In *Advances in Visual Computing –Lecture Notes in Computer Science 6454/2010*, 394-405. Springer, Berlin/Heidelberg. DOI: 10.1007/978-3-642-17274-8_39. (6th Annual International Symposium on Visual Computing Las Vegas, Nevada, November 21 – December 1, 2010. Acceptance rate: 31%).

B. Conference Presentations without Publication
   1. McLaughlin, T., Burnette, T., Fields, T., Gibbs, J., and Parrish, D. "Successful Creative Collaboration Across Time and Space," Accepted for SIGGRAPH 2011 – The 38th International Conference and Exhibition on Computer Graphics and Interactive Techniques, Vancouver, Canada, August 7-11, 2011. Role: organizer, moderator and panelist. Panelists: Tommy Burnette, Lucasfilm Ltd., Tim Fields, author of *Distributed Game Development: Harnessing Global Talent to Create Winning Games*; Jonathan Gibbs, DreamWorks Animation; and David Parrish, Reel FX Creative Studios.

C. Grant Activity
   1. "Pilot: Creative IT Project: Collaborative Undergraduate Computing Studios Facilitating Decentralized Participation", National Science Foundation Division of Information & Intelligent Systems, CreativeIT. Role: Principal Investigator. NSF Project #0855908. Total Award: $293,057 (3 years). Awarded July 2009. Supports one graduate student 12 months per year for the duration of the award.

Research Area: Digital Character Setup and Animation

A. Conference Course Presentations
   1. McLaughlin, T., Cutler, L., and Coleman, D. "Character Rigging, Deformations, and Simulations in Film and Game Production," In ACM SIGGRAPH 2011 Courses (SIGGRAPH '11). ACM, New York, NY, USA, Article 5, 18 pages. DOI=10.1145/2037636.2037641. (38th International Conference and Exhibition on Computer Graphics and Interactive Techniques, Vancouver, Canada, August 7-11, 2011).
   2. McLaughlin, T. and Sumida, S. S. 2007. The morphology of digital creatures. In *ACM SIGGRAPH 2007 Courses*. SIGGRAPH '07. ACM, New York, NY, 1. DOI= http://doi.acm.org/10.1145/1281500.1281660. (34th International Conference and Exhibition on Computer Graphics and Interactive Techniques, San Diego, California, August 05 - 09, 2007).
   3. McLaughlin, T. 2006. Taxonomy of digital creatures: defining character development techniques based upon scope of use. In *ACM SIGGRAPH 2006 Courses*. SIGGRAPH '06. ACM, New York, NY, 1. DOI= http://doi.acm.org/10.1145/1185657.1185808. (33rd

International Conference and Exhibition on Computer Graphics and Interactive Techniques, Boston, Massachusetts, July 30 - August 03, 2006)

4. McLaughlin, T. 2005. Taxonomy of digital creatures: interpreting character designs as computer graphics techniques. In *ACM SIGGRAPH 2005 Courses*. J. Fujii, Ed. SIGGRAPH '05. ACM, New York, NY, 1. DOI= http://doi.acm.org/10.1145/1198555.1198692. (32nd International Conference and Exhibition on Computer Graphics and Interactive Techniques, Los Angeles, California, July 31 - August 04, 2005). (note: Copyright restrictions prevent ACM from providing the full text for this work.)

B. Conference Talk Presentations

1. McLendon*, M., McNamara, A., McLaughlin, T., and Dwivedi*, R. 2009. Connecting the dots: discovering what's important for creature motion. In *SIGGRAPH 2009: Talks* (New Orleans, Louisiana, August 03 - 07, 2009). SIGGRAPH '09. ACM, New York, NY, 1-1. DOI= http://doi.acm.org/10.1145/1597990.1598066
2. McLaughlin, T. and Anderson, J. 1999. Cloth animation for Star Wars: Episode I "The Phantom Menace". In *ACM SIGGRAPH 99 Conference Abstracts and Applications*. SIGGRAPH '99. ACM, New York, NY, 195. DOI= http://doi.acm.org/10.1145/311625.311999. (26th International Conference on Computer Graphics and Interactive Techniques, Los Angeles, California, United States, August 08 - 13, 1999).
3. McLaughlin, T. and Phillips, C. 1999. Creature wrangling and enveloping for Star Wars: Episode I "The Phantom Menace". In *ACM SIGGRAPH 99 Conference Abstracts and Applications*. SIGGRAPH '99. ACM, New York, NY, 196. DOI= http://doi.acm.org/10.1145/311625.312001. (26th International Conference on Computer Graphics and Interactive Techniques, Los Angeles, California, United States, August 08 - 13, 1999).

C. Conference Poster Presentations

1. McLendon*, M., McNamara, A., McLaughlin, T., and Dwivedi*, R. Investigating important visual cues for representative creature motion. SIGGRAPH 2010 The 37th International Conference on Computer Graphics and Interactive Techniques (Los Angeles, California, United States, July 25 - 29, 2010).
2. McLendon*, M., McNamara, A., McLaughlin, T., and Dwivedi*, R. Investigating important visual cues for representative creature motion. Eye Tracking Research & Applications 2010 (Austin, Texas, United States, March 22 - 24, 2010).

D. Conference Exhibition

1. McLaughlin, T. "Dream Dweller" *Animation Screen Room* at the 21st Annual Conference on Computer Graphics and Interactive Techniques, SIGGRAPH 1994 (Orlando, Florida, United States, July 1994).

E. Conference Presentations without Publication

1. McLaughlin, T., and Marino, S., "Dynamic Muscle and Flesh Simulation: Jurrassic Park III", At the 28th Annual Conference on Computer Graphics and Interactive Techniques (28th International Conference on Computer Graphics and Interactive Techniques Los Angeles, California, United States, August 12 – 17, 2001).

F. Grant Activity

1. "HCC-GV: Small: Generating Animal Avatar Animation with Specific Identifiable Traits Based Upon Viewer Perception of Real Animals", National Science Foundation Division of Information & Intelligent Systems, Human Centered Computing. Role: Principal Investigator, Co-PI Dr. Ann McNamara. NSF-IIS Project #1016795. Total award: $499,552 (3 years). Awarded August 2010. Supports two graduate students 12 months per year for the duration of the award.

Research Area: Visual Design for Educational Video Games

A. Conference Paper Presentations
   1. McLaughlin, T., Smith, D., and Brown**, I. A. 2010. "A Framework for Evidence Based Visual Style Development for Serious Games," In *Proceedings of the Fifth International Conference on the Foundations of Digital Games*. 132-138. ACM, New York, NY, 1. DOI: 10.1145/1822348.1822366. (Foundations of Digital Games Conference 2010, Monterrey, California, June 19 – 21, 2010. Acceptance rate: 34%).

B. Journal Articles
   1. Smith, D., McLaughlin, T., and Brown**, I. 2011. "3-D Computer animation vs. live-action video: Differences in viewers' response to instructional vignettes". *Computers in Teacher Education*. Accepted for publication.

C. Conference Poster Presentations
   1. Simms**, M., Smith, D., McLaughlin, T., and Brown**, I., "Stylized vs. Simplified Graphics: Differences in Viewers' Perception of Simulated Actions in Instructional Vignettes," American Educational Research Association 2011 Annual Meeting (New Orleans, Louisiana, United State, April 8 – 12, 2011).

D. Grant Activity
   1. "Alternate Reality Teaching: Our Space" submitted in response to Defense Advanced Research Projects Agency –Information Innovation Office –ENGAGE: Learning to Solve Problems, Solving Problems to Learn, DARPA-BAA-11-36. Role: Member of educational advising group from Texas A&M University. Lead organization: Total Immersion Software, Inc. Award for Texas A&M activities: $138,953 (21 months). Awarded August 2011.
   2. "Teaching Vignette Prototype Development", Vice President for Research, Texas A&M University. Co-PI with Dr. Dennie Smith from the Department of Teaching Learning and Culture, TAMU. Total Award: $60,100 (18 months). Awarded October 2008. Supported one graduate student for 18 months and another for 6 months.

Feature Film Exhibitions and Related Projects

This section is composed for the purpose of illuminating my contributions to projects that are the products of collaborative work in a commercial environment that is not consistently supportive of public disclosure about specific techniques and discoveries. The information listed is composed for brevity and to clarify my role in the work. Projects are listed in reverse chronological order after first being grouped by the scope of my responsibility. Of importance to note are the dates during which ILM/Lucasfilm was developing specific techniques relative to when those techniques were widely adopted across the visual effects industry.

A. Associate Visual Effects Supervisor / Front End Supervisor

Responsibility for overall project artistic and technical supervision, secondary to the visual effects supervisor.

1. **Untitled feature film project**. Fully animated feature film development project. Directed by George Lucas. Produced by Lucasfilm Animation. Project indefinitely postponed in August 2007.
   - Significance of the project:
     - Through this project Lucasfilm Ltd. pushed technology for *z-viz*, the in-house proprietary software developed for pre-visualization projects. The technology is a direct result of George Lucas' stated goal for non-expert users, such as himself and fellow directors, to be able to manage the storyboarding process in a 3D

format. The ultimate goal of *z-viz* is to replace 2D storyboarding with 3D information that is (a) more informative about visual space and movement, and (b) integrate the development of assets used in story development with pre-production and post production.
    - This project pushed the use of digital asset management tools for camera layout and scene dressing. These tools had previously been developed by Vincent Toscano for the Lucasfilm Animation's work on *The Clone Wars* animated television series. My contribution to this effort was to refine the process of classification, definition of variations, and placement tools used for efficiently generating and swapping related types of models and textures in a scene.
    - Lucasfilm Ltd. is committed to integrating tools and processes across its family of companies including Lucasfilm Animation, Industrial Light & Magic, and LucasArts.
- My contributions:
    - Reported to: Tony Plett, Visual Effects Supervisor, Rob Coleman, Animation Director, and Catherine Winder, Producer.
    - Directly reporting to me were the Modeling and Surfacing Supervisor, Martin Murphy and Rigging Supervisor, Ben Cheung. There were approximately 15 artists on their combined teams.
    - Within the *zviz* effort I developed the process permitting the use of facial animation on digital characters. This effort required specification and testing of workflow and coordination with project software engineer Jeffrey Yost.
    - I spearheaded the effort to introduce character rigging techniques common to feature animation projects, such as FK/IK switching and squash and stretch controls, to the procedural character rig generation tool, called *BlockParty*, developed Jason Smith and Jeff White, and used on visual effects projects at ILM. The specific rigging methods introduced were developed by Ben Cheung.
- Scholarly publications detailing derived from this project:
    - Sullivan, S., Williams, C., Porcino, N., and Bullock, D. 2007. LucasArts and ILM: a course in film and game convergence. In *ACM SIGGRAPH 2007 Courses* (San Diego, California, August 05 - 09, 2007). SIGGRAPH '07. ACM, New York, NY, 1. DOI= http://doi.acm.org/10.1145/1281500.1281638
    - Smith, J. and White, J. 2006. BlockParty: modular rigging encoded in a geometric volume. In *ACM SIGGRAPH 2006 Sketches* (Boston, Massachusetts, July 30 - August 03, 2006). SIGGRAPH '06. ACM, New York, NY, 115. DOI= http://doi.acm.org/10.1145/1179849.1179993

2. ***Project 880 (Avatar Test)***. Prototype test project for feature film viability. Director James Cameron. Produced by Lightstorm Entertainment. Visual effects by Industrial Light & Magic.
    - Significance of the project:
        - In summer 2005 Lightstorm Entertainment hired ILM to develop a fully realized test sequence of a scene in the script as a proof-of-concept for the performance capture, virtual sets, visual design of characters and environments, and stereo technology. The larger goal of the test was to gain the confidence of studio funding, primarily from Twentieth Century Fox. This test was delivered in February 2006 and was ultimately successful in gaining the support Lightstorm needed in order to enter full production.
    - My contributions:

- Reported to: Dennis Muren and Eric Brevig, Visual Effects Supervisors, and Janet Lewin, Visual Effects Producer.
- Directly reporting to me were Hayden Landis, Digital Production Supervisor, Michael Koperwas, Modeling Supervisor, and Nelson Sepulveda, Compositing Supervisor. I worked in coordination with Michael Sanders, Motion Capture Supervisor and Steve Sullivan, Director of R&D.
- I was responsible for all character and creature related issues, including defining for James Cameron how ILM's proprietary techniques for facial performance capture simultaneous with body performance capture would work in the context of Rob Legato's virtual photography set. After Visual Effects Supervisor Eric Brevig left the project to direct *Journey to the Center of the Earth* I supervised the on-set performance capture sessions, working under Cameron's direction and in coordination with ILM's R&D team led by Steve Sullivan. As the project moved into production of character design realization and fully rendered shot production Dennis Muren joined the ILM team as Visual Effects Supervisor.

B. Creature Supervisor

Project-wide responsibility for all artistic and technical digital character processes -modeling, rigging, deformations, texturing, dynamics, and the geometry pipeline.

1. ***Son of the Mask***. Live action feature film theatrically released February 2005. Directed by Lawrence Guterman. Produced by Dark Horse Entertainment, Distributed by New Line. Visual effects by Industrial Light & Magic. Production budget: $84 million. Estimated worldwide box office: $57.5 million.
   - Significance of the project:
     - One of two projects on which my primary role was the mentorship of artists new to the role of Creature Supervisor.
     - Notable for effort to create a fully CG digital double toddler, suitable for close-up shots.
   - My contributions:
     - Reported to: Ed Hirsch, Visual Effects Supervisor, Tom Bertino, Animation Supervisor, and Ned Gorman, Visual Effects Producer.
     - Mentorship of Co-Creature Supervisor, Corey Rosen.
2. ***Lemony Snicket's A Series of Unfortunate Events***. Live action film theatrically released December 2004. Directed by: Brad Silberling. Produced by Paramount Pictures. Visual effects by Industrial Light & Magic. Production budget: $140 million. Estimated worldwide box office: $209 million.
   - Awards and recognitions for project:
     - Nomination for 2004 Visual Effects Society Award for Outstanding Performance by an Animated Character in a Live Action Motion Picture.
   - Significance of the project:
     - This project is notable for effort to create a fully CG digital double toddler, Sunny, suitable for close-up shots. The majority of development work to create this effect was completed prior to when I joined the project. I co-supervised the final completion of the key shots, including cloth and hair simulation for Sunny.
   - My contributions:
     - Reported to: Stefan Fangmeier, Visual Effects Supervisor, Colin Brady, Animation Supervisor, and Jeff Olsen, Visual Effects Producer.
     - Mentorship of Co-Creature Supervisor, Michelle Dean, simultaneously while working with Corey Rosen on *Son of the Mask*.
   - Scholarly publications derived from this project:

- Pighin, F. and Lewis, J. P. 2005. Introduction. In *ACM SIGGRAPH 2005 Courses* (Los Angeles, California, July 31 - August 04, 2005). J. Fujii, Ed. SIGGRAPH '05. ACM, New York, NY, 1. DOI= http://doi.acm.org/10.1145/1198555.1198581

- Notable press related to this project:
  - Robertson, B. "A baby performs impossible acts in extremely close-up scenes thanks to a digital double created at ILM for Lemony Snicket", *Computer Graphics World*, http://www.panoscan.com/PanoPress/2005Press/Lemony/LemonySnicket.html

3. ***Van Helsing***. Live action feature film theatrically released May 2004. Directed by Stephen Sommers. Produced by Universal Pictures. Visual effects by Industrial Light & magic. Production budget: $160 million. Estimated worldwide box office: $300.2 million.
   - Awards and recognitions for this project:
     - Nomination for 2004 Academy of Science Fiction, Fantasy & Horror Films, USA (Saturn Award) for Best Special Effects;
     - Nomination for 2004 Visual Effects Society Award for Outstanding Special Effects in Service to Visual Effects in a Motion Picture.
   - Significance of this project:
     - As a result of the extensive digital creature related R&D effort on this project ten members of my team paired with software engineers from ILM's R&D department to describe and disseminate information on the advances at SIGGRAPH 2004.
     - On-screen werewolf skin ripping transformation effects featuring use of cloth dynamics with art-directable and tension based spring snapping.
     - Sequences featuring actresses in complex layered costumes with on-screen transitions to their digital doubles with accurate representations of their costumes followed by art-directable transformations to vampire bride form in which portions of the costumes form the creature's wings.
     - Use of flesh dynamics for Mr. Hyde character; features tetrahedral tessellation method for polygonal mesh volumes with regular distribution, and introduction of conjugant gradient component to solver; these two achievements created greater overall stability and control over the visual results for artists.
     - Increased visual believability through modeling, simulation, artistic control, and rendering of both short and long hair.
     - "Match-a-mation" of actor performance for precise alignment and replacement with digital characters.
     - Use of digital animatics to pre-plan both camera and actor performance in hybrid shots featuring the photographed facial performance of actresses blended with CG neck-through-lower body and wings for vampire brides.
   - My contributions:
     - Reported to: Scott Squires, Visual Effects Supervisor; Ben Snow, Visual Effects Supervisor; Daniel Jeannette, Animation Supervisor, and Gretchen Libby, Visual Effects Producer.
     - Direct reports to me included Modeling Supervisor, Andrew Cawrse; Technical Animation Lead, Lee Fulton; Lead Texture Artist, Jean-Claude Langer; along with their crews of all digital modelers, texture artists, creature development artists, and character dynamics artists. Total number approximately 35.
     - Supervised pre-production creature design and creature effects development along with ILM Art Department and R&D department to ensure translation from art department through realization of CG models and creature effects techniques.

Creature design and art direction was handled by ILM Art Department with Christian Alzmann, Carlos Huante, and Brian O'Connell.

- Scholarly publications derived from this project:
  - Sumner, N., Rapkin, A., Aplin, S., Cawrse, A., Fulton, L., Pelle, T., Peterson, P., and Wong, E. 2004. There's more than one way to skin a wolf: wolf transformations in "Van Helsing": Copyright restrictions prevent ACM from providing the full text for this work. In *ACM SIGGRAPH 2004 Sketches* (Los Angeles, California, August 08 - 12, 2004). R. Barzel, Ed. SIGGRAPH '04. ACM, New York, NY, 52. DOI= http://doi.acm.org/10.1145/1186223.1186288
  - Bridson, R., Marino, S., and Fedkiw, R. 2003. Simulation of clothing with folds and wrinkles. In *Proceedings of the 2003 ACM Siggraph/Eurographics Symposium on Computer Animation* (San Diego, California, July 26 - 27, 2003). Symposium on Computer Animation. Eurographics Association, Aire-la-Ville, Switzerland, 28-36.
  - Kautzman, R., Maiolo, A., Griffin, D., and Buecker, A. 2004. Jiggly bits and motion retargeting: bringing the motion of Hyde to life in Van Helsing with dynamics: Copyright restrictions prevent ACM from providing the full text
- Notable press related to this project:
  - Duncan, J. "Van Helsing: Man Made Monsters". *Cinefex* July 2004. 98. Pp. 98-124. Print.
  - Mallory, M. "Feel Their Pain: 'Van Helsing' Brings Creature Feature Standbys Up to Date". *Los Angeles Times* 6 May 2004. http://articles.latimes.com/2004/may/06/news/wk-movies6
  - Gross, E. "Die Monsters Die". *CFQ Cinefantastique* April-May 2004. 34. Pp. 34-40, 70-71. Print.

4. ***Dreamcatcher***. Live action feature film theatrically released March 2003. Directed by Lawrence Kasdan. Produced by Castle Rock Entertainment. Distributed by Warner Bros. Visual effects by Industrial Light & Magic. Production budget: $68 million. Estimated worldwide box office: $75.7 million.
   - Significance of this project:
     - To my knowledge this was the first use of sub-surface light scattering in a visual effects film. This rendering effect was used extensively on the alien digital creatures Mr. Gray A, Mr. Gray B, and the S*weasel. Technique development primarily spear-headed by John Walker, David Horsley, and Christophe Hery. Later industry-wide recognition for this development came through the 2003 Academy of Motion Picture Arts and Sciences Technical Achievement Award for implementation of practical methods for rendering skin and other translucent materials.
     - Possibly first use of rigid body dynamics to create physically plausible "rag doll" behavior of digital characters with deformable surfaces. Used here for Mr. Gray B creatures impacted by explosions. Original exploration of technique for feature film production was done by Hiromi Ono for *Hulk* (2003) released three months after *Dreamcatcher*. Her work built upon the use of rigid body dynamics for the battle droids in *Star Wars: Episode I "The Phantom Menace"* (1999).
   - My contributions:
     - Reported to: Stefan Fangmeier, Visual Effects Supervisor, Hal Hickel, Animation Supervisor, and Jeff Olson, Visual Effects Producer.
     - Directly reporting to me were Andrew Cawrse, Model Supervisor, and Keiji Yamaguchi, Lead Technical Animator.

- My responsibility to this sub-surface scattering development effort included over-seeing proper modeling and deformation of geometry to work with the light scattering shaders.
- Branko Grujcic created the "rag doll" rigid body set-ups under my direction.

- Scholarly publications derived from this project:
  - Horsley, D. F. 2003. Mr. Gray B. puts on a happy face. In *ACM SIGGRAPH 2003 Sketches & Applications* (San Diego, California, July 27 - 31, 2003). SIGGRAPH '03. ACM, New York, NY, 1-1. DOI= http://doi.acm.org/10.1145/965400.965493
  - Hery, C. 2005. Implementing a skin BSSRDF: (or several..). In *ACM SIGGRAPH 2005 Courses* (Los Angeles, California, July 31 - August 04, 2005). J. Fujii, Ed. SIGGRAPH '05. ACM, New York, NY, 4. DOI= http://doi.acm.org/10.1145/1198555.1198584
  - Kačić-Alesić, Z., Nordenstam, M., and Bullock, D. 2003. A practical dynamics system. In *Proceedings of the 2003 ACM Siggraph/Eurographics Symposium on Computer Animation* (San Diego, California, July 26 - 27, 2003). Symposium on Computer Animation. Eurographics Association, Aire-la-Ville, Switzerland, 7-16.

5. ***Men In Black II***. Live action feature film theatrically released July 2002. Directed by Barry Sonenfeld. Produced by Amblin Entertainment. Distributed by Columbia Pictures. Visual effects by Industrial Light & Magic. Production budget: $140 million. Estimated worldwide box office: $441.8 million.
   - Awards and recognitions for the project:
     - Nomination for 2002 Visual Effects Society Award for Best Visual Effects in an Effects Driven Motion Picture.
   - Significance of the project:
     - Use of Maya and in-house developed tools to procedurally generate the Serleena creature, an animatable, multi-tendriled, plant.
     - Internal development of significantly more robust, realistic, and stable cloth simulation techniques used on digital versions of the worm guys and digital doubles of MIB agents Kay and Jay.
   - My contributions:
     - Reported to John Berton, Visual Effects Supervisor; Erik Mattson, Associate Effects Supervisor; Tom Bertino, Animation Supervisor, and Ned Gorman, Visual Effects Producer.
     - Directly reporting to me were Modeling Supervisor, Ken Bryan, Viewpaint Supervisor, Catherine Craig, and all other creature development artists for rigging, deformations, and dynamics.
     - Supervised pre-production creature design and creature effects development along with ILM Art Department and R&D department to ensure translation from art department through realization of CG models and creature effects techniques. Creature design and art direction was handled by ILM Art Department with David Nakabayashi, Christian Alzmann and Carlos Huante.
   - Scholarly publications derived from the project:
     - Bridson, R., Fedkiw, R., and Anderson, J. 2002. Robust treatment of collisions, contact and friction for cloth animation. In *Proceedings of the 29th Annual Conference on Computer Graphics and interactive Techniques* (San Antonio, Texas, July 23 - 26, 2002). SIGGRAPH '02. ACM, New York, NY, 594-603. DOI= http://doi.acm.org/10.1145/566570.566623
6. ***Jurassic Park III***. Live action feature film theatrically released July 2001. Directed by Joe Johnston. Produced by Universal Pictures. Visual effects by Industrial Light & Magic.

Production budget: $93 million. Estimated worldwide box office: $368.7 million.

- Awards and recognitions for project:
  - Nomination for 2001 Academy of Science Fiction, Fantasy & Horror Films, USA (Saturn Award) for Best Special Effects
  - Nomination for 2001 Satellite Awards (Golden Satellite Award) for Best Visual Effects.
- Significance of the project:
  - This was the first project, to my knowledge, to employ the role of Creature Supervisor. This role is the equivalent of a CG Supervisor in reporting structure, but with specific responsibility for digital creature development issues including all modeling, texturing, rigging, deformations, dynamics, and the geometry pipeline for production. This role and organizational structure has since been widely adopted within the industry for large digital character intensive projects. 3D animation companies will typically use the synonymous term Character Supervisor
  - Large-scale extension of earlier flesh simulation developments created at ILM for *The Mummy* (1999). Improvements included more detailed rigging and action of muscles used internal collisions objects for the tetrahedral flesh meshes.
- My contributions:
  - Reported to: Jim Mitchell, Visual Effects Supervisor, Dan Taylor, Animation Supervisor, and Mark Miller, Visual Effects Producer.
  - Direct reports to me included Ken Bryan, Modeling Supervisor; Jean-Claude Langer, Viewpaint Supervisor; and Technical Animation Supervisor, Dennis Turner.
  - Development of the role of Creature Supervisor, along with ILM Production Manager Ken Maruyama.
  - Technical Animation Supervisor, Dennis Turner, R&D Supervisor John Anderson, and I developed a muscle rigging and flesh simulation system for seven different dinosaur models. We were inspired by the visual weight given by flesh simulation in Disney's *Dinosaur* (2000).
- Scholarly publications derived from this project:
  - Wang, X. C. and Phillips, C. 2002. Multi-weight enveloping: least-squares approximation techniques for skin animation. In *Proceedings of the 2002 ACM Siggraph/Eurographics Symposium on Computer Animation* (San Antonio, Texas, July 21 - 22, 2002). SCA '02. ACM, New York, NY, 129-138. DOI= http://doi.acm.org/10.1145/545261.545283
  - 2001. INDUSTRIAL LIGHT + MAGIC: Research and Development 2001. In *ACM SIGGRAPH 2001 Video Review on Electronic theater Program* (August 12 - 12, 2001). SVR '01, vol. 138. ACM, New York, NY, 23. DOI= http://doi.acm.org/10.1145/945314.945337
- Notable press related to the project:
  - Deckel, L. "Jurassic Park III: Bigger, Faster, Meaner". *Cinefex*. October 2001. 87. Pg. 29.

C. Creature Development Supervisor

Project-wide responsibility for a sub-set of digital character processes -deformations, dynamics and the geometry pipeline.

1. ***War of the Worlds***. Live action feature film theatrically released June 2005. Directed by Steven Spielberg. Produced by Paramount Pictures. Visual effects by Industrial Light & Magic. Production budget: $132 million. Estimated worldwide box office: $591.7 million.

- Awards and recognitions for the project:
  - Nomination for 2005 Academy of Motion Picture Arts and Sciences Award (Oscar) for Best Achievement in Visual Effects.
  - Won 2005 Visual Effects Society Award for Best Single Visual Effect.
  - Won 2005 Visual Effects Society Award for Outstanding Compositing in a Motion Picture.
  - Won 2005 Visual Effects Society Award for Outstanding Models and Miniatures in a Motion Picture.
  - Nomination for 2005 Academy of Science Fiction, Fantasy & Horror Films, USA (Saturn Award) for Best Special Effects.
  - Nomination for 2005 Satellite Awards for Best Visual Effects.
- Significance of the project:
  - This project is notable within the visual effects industry for significantly altering the scheduling structure, and therefore the pricing structure, of visual effects driven films. Through the expertise of director Steven Spielberg and his key creatives, including Visual Effects Supervisor Dennis Muren, this production went from concept to final print in approximately one year, with a post production schedule lasting only 12 weeks. Subsequently, many productions have attempted to follow this model.
  - While pursuing an aggressive production schedule ILM introduced its next generation production integration software, called *zeno*, to be used on a trial basis on *War of the Worlds*. A key goal of *zeno* was reversal of the industry trend toward specialization by providing artists with control over many aspects of visual effects artistry through a single piece of software while also permitting elements to originate from a wide variety of vendor tools.
- My contributions:
  - Reported to Dennis Muren, Visual Effects Supervisor, Pablo Helman, Visual Effects Supervisor, Randal Dutra, Animation Director, and Curt Miyashiro, Digital Production Supervisor.
  - Directly reporting to me were approximately 15 artists responsible for character rigging, deformations, dynamics and the geometry pipeline.
  - My responsibility to this effort was to work with ILM's software engineers to turn the *zeno* into production-ready software capable of meeting the demands of intense digital creature work, and develop processes that ILM's artists could follow to implement *zeno* efficiently with the required artistic control.
- Notable press related to the project:
  - Fordham, J. "War of the Worlds: Alien Apocalypse". *Cinefex* October 2005. 103. Pg. 87.
  - Cohen, D. "Blockbusters take toll on f/x shops". *Variety*. May 25, 2007. http://www.variety.com/article/VR1117965871?refCatId=2520

1. ***CG Yoda Test***. Fully computer generated test of the feasibility of replacing the puppet Yoda with a computer animated character for Star Wars Episode II (early 2000). Director George Lucas. Produced by Industrial Light & Magic. Budget undisclosed.
   - Significance of the project:
     - Results of project led to the replacement of hand-puppeteered Yoda with a CG Yoda in subsequent Star Wars films *Episode II – Attack of the Clones* (2002) and *Episode III – Revenge of the Sith* (2005). The 2005 DVD re-release, and 2012 theatrical re-release of *Episode I – The Phantom Menace* have also been altered to replace the hand-puppeteered Yoda with the digital version.

- My contributions:
  - Reported to Rob Coleman, Animation Director.
  - Responsible for deformations and the geometry pipeline.

2. ***Brother Termite Test***. Fully computer generated test of the feasibility of facial motion capture re-targeted to a non-human face. Client: James Cameron. Produced by Industrial Light & Magic. Budget undisclosed.
   - Significance of the project:
     - Taking place in late 1999 this project was, to my awareness, the first commercial use of image based capture for facial performances. We captured the performance of a human actor and retargeted the results to a model with abstracted human facial forms. I was responsible for rigging and deformations on both the model used in the facial performance capture and the model used as a key-frame driven comparison.
   - My contributions:
     - Reported to Christian Rouet, Head of R&D.
     - Responsible for the deformations and geometry pipeline of both the performance capture test and the key-frame animated version used for comparison.
3. ***The Hauting***. Live action feature film theatrically released July 1999. Directed by Jan de Bont. Produced by DreamWorks. Visual effects by Industrial Light & Magic. Production budget: $80 million. Estimated worldwide box office: $177.3 million.
   - My contributions:
     - Reported to: Scott Farrar, Visual Effects Supervisor.
     - Setup deformations and wrangled the geometry pipeline on CG characters featured in a key sequence in the film in which sculptural figures in relief on a door come to life.
4. ***Star Wars: Episode I "The Phantom Menace".*** Live action feature film theatrically relased may 1999. Directed by George Lucas. Produced by Lucasfilm Ltd. Visual effects by Industrial Light & Magic. Production budget: $115 million. Estimated worldwide box office: $924.3 million (not counting the 2012 stereographic re-release)
   - Awards, and recognitions for project:
     - Nominated for 1999 Academy of Motion Pictures Arts and Sciences Award (Oscar) for Best Achievement in Visual Effects.
     - Won 1999 Academy of Science Fiction, Fantasy & Horror Films, USA (Saturn Award) for Best Special Effects.
     - Nominated for 1999 British Academy of Film and Television Arts (BAFTA) for Best Achievement in Special Visual Effects.
     - Nominated for 1999 Las Vegas Film Critics Award for Best Visual Effects;
     - Nominated for 1999 Satellite Award for Best Single Visual Effects.
   - Significance of the project:
     - At the time of its development and release Episode I was by far the largest and most complicated visual effects production ever undertaken. The total number of visual effects shots was over 900. The previous record was somewhere around 400 (by comparison, the first Jurassic Park, released just six year earlier, had only around 40 shots).
     - The total number of different digital characters was 67.
     - Jar Jar Binks was the first digital character to be widely critiqued as an actor, as opposed to being talked about as a digital character. Though the commentary was generally negative, this reaction established the character as believable, and thus successful and effective from a visual effects point of view.

  - Rigid body dynamics were used for character animation battle droids being destroyed. The control systems, process of transitioning from key-frame to dynamics, and method for integration into the production pipeline was developed by Jim Hourihan, Cary Phillips, and James Tooley.
  - John Anderson, Jim Hourihan, Cary Phillips and Sebastian Marino received Technical Achievement Awards in 2002 from the Academy of Motion Pictures Arts and Sciences for the development of the ILM Creature Dynamics System. The system was largely developed for Star Wars Episode I.
- My contributions:
  - Reported to: Visual Effects Supervisors Joe Letteri, Dennis Muren, Scott Squires, and John Knoll; Animation Director Rob Coleman, and visual effects producers Jeff Olsen, Ned Gorman, and Judith Weaver.
  - Directly reporting to me were approximately two dozen creature development artists.
  - In the fall of 1996, in early pre-production, I proposed the creation of a new role, called Zookeeper, with the responsibility of managing all of the digital model assets and the trouble-shooting the geometry pipeline. This was pre-cursor to the Creature Supervisor role, though more limited in scope of responsibility.
  - As part of the Zookeeper role I developed a script based asset management tool that could be accessed by all artists updating model assets and all artists pulling assets into shots with appropriate listing in *caricature* shotfiles. This tool employed a database and numbering system to ensure that model assets and their accompanying files were kept in sync. To my knowledge, this system was the first use of an asset management system in visual effects production.
  - This project initiated the role now known in the industry as Creature Developer, Creature TD, or Character TD. Two teams of digital artists worked the entire length of production, one under the direction of James Tooley concentrating on character rigging and rigid body dynamics, and one under my direction focusing on deformations, cloth & hair simulations, asset management, and geometry pipeline troubleshooting. Technical artists specializing in and dedicated to character setup and character effects is now common industry-wide and as an area of study.
  - Jar Jar's ear animation employed both key-frame animation with standard joint-based deformations and cloth simulations. Control was provided to the creature development artists through a system of animatable cloth parameters and area maps. The cloth engine, accessed through the in-house software tool *caricature*, was developed initially by Jim Hourihan with application testing and direction from CG Supervisor Doug Smythe. I inherited the project and developed it specifically for tests of Jar Jar as a digital character capable of carrying a lead role in the film.
  - Working with software engineer John Anderson I adapted pipeline integration techniques, methods for determining dynamics attributes, and use of area maps for control for use of the cloth engine on cloth and cloth-like parts of characters throughout the film. The methods proved to be robust, extensible, and artistically manageable enough that cloth and hair dynamics were used on over 20 digital characters and produced by more than a dozen digital artists.
  - This project introduced *carienv*, a tool for defining the influence of multiple transforms on multiple surfaces as volumes of influence rather than parametrically. I developed specifications for the tool and led development from

the creature artist's point of view. Vishwa Ranjan engineered the software under the supervision of Cary Phillips. I originally setup Jar Jar's skin deformations using *ienv*, the parametric enveloping system. Once *carienv* was ready for production Aaron Ferguson used it to re-envelope Jar Jar. Aaron Pfau extended its functionality by combining volumetric definition of joint influences with the surface-to-surface property transfer function of the cloth dynamics system. The combined effect permitted highly smooth deformation falloff delineations to be transferred to highly irregular surfaces.

- Scholarly publications derived from this project:
  - McLaughlin, T. and Anderson, J. 1999. Cloth animation for Star Wars: Episode I "The Phantom Menace". In *ACM SIGGRAPH 99 Conference Abstracts and Applications* (Los Angeles, California, United States, August 08 - 13, 1999). SIGGRAPH '99. ACM, New York, NY, 195. DOI= http://doi.acm.org/10.1145/311625.311999
  - McLaughlin, T. and Phillips, C. 1999. Creature wrangling and enveloping for Star Wars: Episode I "The Phantom Menace". In *ACM SIGGRAPH 99 Conference Abstracts and Applications* (Los Angeles, California, United States, August 08 - 13, 1999). SIGGRAPH '99. ACM, New York, NY, 196. DOI= http://doi.acm.org/10.1145/311625.312001
  - Taylor, J. and Hourihan, J. 1999. Technical animation issues for the battle droids of Star Wars: (Episode I "The Phantom Menace"). In *ACM SIGGRAPH 99 Conference Abstracts and Applications* (Los Angeles, California, United States, August 08 - 13, 1999). SIGGRAPH '99. ACM, New York, NY, 206. DOI= http://doi.acm.org/10.1145/311625.312019
- Notable press related to the project:
  - Duncan, J., Martin, K. H., Cotta Vaz, M. "The Phantom Menace: Hero's Journey". *Cinefex*. July 1999. *78*. Pg 92.
  - Williams, P. J. "Racial ventriloquism". *The Nation*. June 17, 1999. http://web.archive.org/web/20060920011550/http://www.thenation.com/doc/19990705/williams

E. Creature Developer

Character specific responsible for deformations and dynamics; Responsible to the Creature Supervisor or Computer Graphics Supervisor

1. **Eragon.** Live action feature film theatrically released December 2006. Directed by Stefan Fangmeier. Produced by Fox 2000 Pictures. Visual effects by Industrial Light & Magic. Production budget: $100 million. Estimated worldwide box office: $249.4 million.
   - Significance of the project:
     - Notable for the use of a photo-real computer generated lead character, the dragon Saphira, in a live action production.
   - My contributions:
     - Reported to: Aaron Ferguson, Creature Supervisor.
     - I joined the crew during final months of shot production to assist in shape animation, rigid body, cloth, hair, and flesh dynamics working primarily on the lead digital creature, the dragon Saphira.
2. ***Pirates of the Caribbean – Dead Man's Chest.*** Live action feature film theatrically released July 2006. Directed by Gore Verbinski. Produced by Walt Disney Pictures.

Visual effects by Industrial Light & Magic. Production budget: $225 million. Estimated worldwide box office: $1.06 billion.

- Awards and recognitions for this project:
  - Won 2006 Academy of Motion Picture Arts and Sciences Award (Oscar) for Best Achievement in Visual Effects.
  - Won 2006 British Academy of Film and Television Arts (BAFTA) Award for Best Achievement in Special Visual Effects.
  - Won 2006 Visual Effects Society Award for Best Single Visual Effect.
  - Won 2006 Visual Effects Society Award for Outstanding Animated Character in a Live Action Motion Picture.
  - Won 2006 Visual Effects Society Award for Outstanding Visual Effects in a Visual Effects Driven Motion Picture.
  - Won 2006 Academy of Science Fiction, Fantasy & Horror Films, USA (Saturn Award) for Best Special Effects.
  - Won 2006 Hollywood Film Festival Award for Visual Effects of the Year;
  - Won 2006 Satellite Award for Best Visual Effects
- Significance of the project:
  - Notable for its use of optical motion tracking to achieve motion capture performances during first unit filming. This led to tighter integration of the computer generated pirate crew characters with the live action actors and backgrounds. This technology was recognized for its impact on filmmaking with a 2009 Academy of Motion Picture Arts and Sciences Technical Achievement Award.
  - Notable for high level of photo-realism achieved in the rendering and secondary animation performance of Davey Jones and his crew. Most viewers mistakenly believed these digital characters were actors in prosthetic makeup and suits.
  - Davey Jones' tentacle beard featured user controllable impulse driven rigid body dynamics and "stiction" to dynamically create and destroy spring connections between the tentacle skin and other surfaces. I was the Creature TD responsible for creating the tentacle animation, flesh, and hair simulations for approximately eight shots featuring Davey Jones and his crew.
- My contributions:
  - Reported to: James Tooley, Creature Supervisor.
  - I joined the crew during final months of shot production to assist in shot production for the shape, rigid body, cloth, hair, and flesh dynamics of Davey Jones and his pirate crew.
- Scholarly publications derived from the project:
  - Criswell, B., Derlich, K., and Hatch, D. 2006. Davy Jones' beard: rigid tentacle simulation. In *ACM SIGGRAPH 2006 Sketches* (Boston, Massachusetts, July 30 - August 03, 2006). SIGGRAPH '06. ACM, New York, NY, 117. DOI= http://doi.acm.org/10.1145/1179849.1179995

3. ***The Island***. Live action feature film theatrically released June 2005. Directed by: Michael Bay. Produced by DreamWorks SKG. Visual effects by Industrial Light & Magic. Production budget: $126 million. Estimated worldwide box office: $162.9 million.
   - Significance of the Project
     - Project was the second to use ILM's new proprietary 3D graphics software system, *zeno*, as the backbone of the visual effects production pipeline.
     - Notable for its use of digital doubles to handle stunt-work for lead characters.
   - My contributions:

- Reported to Eric Brevig, Visual Effects Supervisor, and Scott Benza, Animation Director. Coordinated closely with Andy Buecker, Creature Supevisor.
- My primary responsibility was to carryover knowledge and techniques from *War of the Worlds* to the artists on *The Island*.

5. ***The Adventures of Rocky and Bullwinkle***. Live action feature film theatrically released June 2000. Directed by Des McAnuff. Produced by Capella International. Distributed by Universal Pictures. Visual effects by Industrial Light & Magic. Production budget: $76 million. Estimated worldwide box office: $35.1 million.
   - Significance of the project:
     - To my knowledge, this project was the first live action feature film to include cel shaded, also known as "toon shaded", CG characters.
   - My contributions:
     - Reported to: Aaron Ferguson, Creature Development Supervisor; and Cary Phillips R&D software developer.
     - My primary responsibility on the project involved developing a deformation technique for the lead characters (Rocky and Bullwinkle) that would result in highly smooth curved b-spline surfaces suitable for use of cel shaders.

F. Technical Director

Asset and/or shot specific responsibility for a variety of processes -deformations, lighting, compositing, pipeline testing.

1. ***ObaQ Process Management Testing***. In-house Industrial Light & Magic production tools development project to test the production readiness of software for managing processes across the ILM network.
   - Significance of the project:
     - Taking place in 1996 this effort was the first, to my knowledge, job queuing system for large scale digital productions that incorporated a systemic view of managing computing resources and processes. There are many tools on the market today to accomplish this task, but at the time having the capability of organizing processes by available machines, machine processing power, memory, and priority was novel.
   - My contribution:
     - Reported to: Euan MacDonald, Production Software TD.
     - I was responsible for organizing, running, and measuring the results of tests reflecting the way process management tools would be used in production by technical directors.
2. ***Mars Attacks!*** Live action film theatrically released December 1996. Directed by Tim Burton. Produced by Warner Bros. Visual effects by Industrial Light & Magic. Production budget: not available. Estimated worldwide box office: $101.3 million.
   - Awards and recognitions:
     - Nominated 1996 Academy of Science Fiction, Fantasy & Horror Films, USA (Saturn Award) for Best Special Effects.
     - Nominated for 1996 Satellite Award for Best Single Visual Effects.
   - Significance of the project:
     - Originally in development as a live action film with stop-motion animated Martian characters.
     -
   - My contributions:
     - Reported to Visual Effects Supervisor Jim Mitchell and CG Supervisor Roger Guyett.

- In late 1995 I was Technical Director for a test shot supervised by Jim Mitchell, animated by David Andrews, and produced by Mark Miller in which we demonstrated the effectiveness of a using digital characters for the Martians using background plates from the stampede sequence in *Jumanji*. The success of this test shot helped convince Tim Burton and Warner Bros. that ILM could produce CG Martians with the same look and movement of stop motion animation.
- Responsible for deformations on all digital characters and wrangling the geometry pipeline.
- Developed models used for sequence featuring Sarah Jessica Parker's head attached to the body of a Chihuahua. Adapted digital puppy model from *101 Dalmations* for use as Poppy the Chihuahua, complete with fur maps. Lit, rendered and composited three shots in the sequence.
- Techniques for interactively handling crowd animation scenes within ILM's proprietary softward, *caricature*, were developed by Roger Guyett and Andy White with Cary Phillips from ILM's R&D team. I helped wrangle the use of *caricature* and geometry pipeline issues by technical directors and animators.

- Notable press related to the project:
  - Cotta Vaz, M. "Mars Attacks!: Martial Art". *Cinefex*. December 1996. 68. Pg. 73.

3. ***BMW Penguins***. Live action 30-second commercial broadcast in 1996. Director: Steve Beck. Client: Fallon McElligott for BMW of North America. Budget: not available.
   - Awards and Recognitions:
     - Won 1995 Clio Gold Award
   - My contributions:
     - Reported to: CG Supervisor Doug MacMillan.
     - I was responsible for helping to transfer fur rendering setup and techniques from *Jumanji* to use as downy feathers on CG penguins.
4. ***Jumanji***. Live action feature film theatrically released December 1995. Directed by Joe Johnston. Produced by TriStar Pictures. Visual effects by Industrial Light & Magic. Production budget: $65 million. Estimated worldwide box office: $162.3 million.
   - Awards and recognitions:
     - Won 1995 Academy of Science Fiction, Fantasy & Horror Films, USA (Saturn Award) for Best Special Effects.
   - Significance of the project:
     - Extended ILM's fur rendering techniques developed first for the digital character, Kitty, in *The Flintstones* (1994). Used extensively for the digital lion. This work was managed by CG Supervisors Carl Frederick and Doug Smythe, with significant contributions from Christophe Hery. Jeff Yost, David Benson, Florian Kainz, John Horn, and ILM's Head of R&D, Christian Rouet, worked on the software engineering side.
     - Introduced ILM's proprietary software, *caricature*, for facial animation. Developed by Cary Phillips, *caricature* allowed artists to preview soft shaded surfaces, including shape deformations, in real time on high resolution geometry. Prior to the use of caricature, artists had to generate the effects of geometric transformations as frame-by-frame as off-line processes. Caricature was patented in 1999 and Cary Phillips won a Technical Achievement Award from the Academy of Motion Picture Arts and Sciences.
   - My contributions:
     - Reported to: CG Supervisors Jim Mitchell, Carl Frederick, Ellen Poon, and Doug

Smythe.
  - Primary and secondary enveloping (deformations) as well as socking for the zebra, monkeys, and lion.
  - Shape animation for movement of the lion's musculature.
  - Rendering and compositing for several mosquito and tornado shots.

5. ***Supercuts Stylin.*** Live action 30-second commercial broadcast in 1995. Directed by Steve Beck. Client: J. Walter Thompson for Supercuts. Visual effects by Industrial Light & Magic.
   - Awards and Recognitions:
     - Won a 1995 Clio Certificate Award
   - My contributions:
     - Reported to: Steve Beck, Director.
     - Responsible for setting up the deformations on CG hair stylist's scissors that danced like ballerinas.

J. Invited Talks

1. "The Modern-Day DaVinci", Panelist at Creative Talent Network, Burbank, California, November 18, 2011. Moderator: David Parrish, Reel FX. Fellow Panelists: Bryan Engram, Reel FX, Stan Syzmanski, StanleyVision, Inc., and Chantal Bumgarner, Digital Domain.
2. "Designing Curriculum for 3D Computer Animation: Innovation and Experimentation for an Evolving Discipline," Panelist at SIGGRAPH 2011 – The 38th International Conference and Exhibition on Computer Graphics and Interactive Techniques, Vancouver, Canada, August 11, 2011. Moderator: Raquel Coelho, San Jose State University. Fellow Panelists: Jim McCampbell, Ringling School of Art & Design, Eric Riewer, Gobelins, Maija Burnett, CalArts, Thomas Haegele, Filmakademie, Marilyn Friedman, DreamWorks Animation, and Dawn Rivera-Ernster, Walt Disney Animation Studios.
3. "Advances in Animation and Visualization Technologies." Talk presentation given at the University of Texas at Dallas' New Models for Interfacing Art and Technology: Advanced Educational Gaming and 3D Animation symposium, April 15, 2011. Presented by The Institute for Innovation and Entrepreneurship, Richardson, Texas.
4. "A Landscape of Game Design Programs in Texas", Presentation given at Game On! Texas symposium, Austin, Texas. April 12, 2011.
5. "Inter-departmental Collaboration in Animation Production and Pre-service Teacher Training." Presentation given at Texas A&M University's College of Education and Human Development Advisory Board, November 12th, 2010. Annenberg Presidential Conference Center, College Station, Texas.
6. "Houston Summit for the Creative Economy – Digital, Design, and Film", Houston, Texas. October 22, 2010. Panelist. Fellow Panelist: Jerry Alexander, Acumen Design.
7. "Educators Panel Discussion," Panelist at DreamWorks Animation SKG 7th Annual Educators' Symposium, Glendale, California. July 26th, 2010. Panel moderator: Angela Lepito, DreamWorks Animation; Fellow panelists: Bobby Beck, Animation Mentor, Alice Carter, San Jose State University, Jim McCampbell, Ringling College of Art & Design, and Jeremy Moorshead, Savannah College of Art & Design.
8. "Twenty-First Century Careers – Preparing Students for Their Future, Not Our Past," Panelist at Texas Regional Collaboratives 16th Annual Meeting, Austin, Texas. June 30, 2010. Panel moderator: Dr. Keith Mitchell, Texas Regional Collaboratives

Coordinator of Technology; Fellow panelists: Dr. Leslie Miller, Executive Director, Rice University Center of Teaching and Learning, Mr. Stephan Samuleson, President and CEO of Twist Education; Mr. Spencer Zuzolo, President of 3DSquared.

9. "Post-Secondary Game Development Education", Panelist at Game On! Texas symposium, Austin, Texas. April 7, 2010. Panel moderator: Leah Smith, Texas Film Commission; Fellow panelists: Dr. Tom Linehan, Director of Arts & Technology at the University of Texas at Dallas, Dr. Kevin Ludlam, Executive Director of Development, Baylor University, Dr. Peter Raad, Executive Director of the Guildhall at Southern Methodist University, and Linda Smarzik, Dean of Computer Studies and Advanced Technology at Austin Community College.
10. "Watch the Visual Arts to See the Future of Technology Development", Keynote speaker at Corning Patent Awards Ceremony, Corning, New York. March 30, 2010.
11. "Shaping Society Through Visual Technology", Presentation for the High School Education Program at the George Bush Library and Museum, College Station Texas; March 4th, and 10th, 2010.
12. "Visual Creativity, Technology and the On-Demand Generation", Talk given at the College of Architecture Research Symposium, Texas A&M University, College Station, Texas; October 2009.
13. "Visual Creativity, Technology and the On-Demand Generation", Keynote speaker at the Society for Information Display (SID) Display Week Awards Luncheon, San Antonio, Texas; June 2009.
14. "The Texas A&M Visualization Department," Speaker at Sam Houston State University SIGGRAPH Chapter meeting. October 28, 2008.
15. "TV Magazine with Sharon Colson," Invited guest. KAMU-TV, Texas A&M University, October 22, 2008.
16. "The Next Great Talent Search," Panelist at SIGGRAPH 2008, Los Angeles, California. August 18, 2008.
17. "The Morphology of Digital Creatures," Talk given at the Research on the Built and Virtual Environments: Global Symposia, Texas A&M University, College Station, Texas. October 29, 2007.
18. "The Visual Effects of *Van Helsing*," Universal Pictures press junket, New York, New York. June 2004. Fellow presenters included Scott Squires, Visual Effects Supervisor and Christian Alzmann, Art Director.
19. "Alternative Careers with an Architecture Education," Presentation given at the AIAS Annual Convention, Austin, Texas. December 30, 2003.
20. "The Use of Softimage in *Jurassic Park III*," Multiple presentations given to the Softimage User's Groups, Tokyo and Osaka, Japan. October 2001.
21. "The Art of Visual Effects," Talk given at the University Filmmakers Alliance Conference, University of Texas at Austin, Texas. Spring 2001.
22. "Creature Effects in *Star Wars Episode I*," Multiple booth presentations at the International Broadcasters, Amsterdam, The Netherlands. September 2000.
23. "Creature Wrangling and Enveloping for *Star Wars Episode I 'The Phantom Menace'*," Talk given at the London Effects and Animation Festival, London, England. November 18, 1999.
24. "Cloth Animation for *Star Wars Episode I 'The Phantom Menace'*," Talk given at the London Effects and Animation Festival, London, England. November 18, 1999.
25. "Virtual Actors – A Reality In Our Age?" Panelist at the London Effects and Animation Festival, London, England. November 1998.

26. "Modeling with Tim McLaughlin," Masters Class presentation given at the London Effects and Animation Festival, London, England. November 1998.
27. "Alternative Careers with an Architecture Education," Presentation and panel discussion at the AIAS Bridge City Forum 95, Portland, Oregon. November 1995.

K. Selected Reviews and Interviews

1. "Aggies Feel Connection to Steve Jobs", KBTX Channel 3. Broadcast story aired on local news and web story written on 6 October 2011. Sourced 10 October 2011. http://www.kbtx.com/home/headlines/Aggies_Feel_Connection_to_Steve_Jobs_131252604.html
2. "Film Industry Has Eyes on Texas A&M Visualization Program", Financial Tech Spotlight. Web story written 7 July 2011. Sourced 10 October 2011. http://financial.tmcnet.com//mergers-acquisitions/news/2011/07/07/5620791.htm
3. "Automated Avatars and Eye Tracking", Eye Tracking Update blog. Written 18 January 2011. Sourced 10 October 2011. http://eyetrackingupdate.com/2011/01/18/automated-avatars-eye-tracking/
4. "NSF Avatar Grant Expected to Revolutionize Virtual Representations", Educational Games Research blog. Written 5 October 2010. Sourced 4 October 2011. http://edugamesresearch.com/blog/tag/tim-mclaughlin/
5. "College of Architecture, Tim McLaughlin", *European Union Center News –Texas A&M University*. Fall 2010.
6. "Professor Gets Avatar Grant", The Eagle, 4 October 2010. http://www.theeagle.com/am/Professor-gets--avatar--grant.
7. "The Future of Pedagogical Methodologies in Creature Development: How procedural tools can help facilitate creature development and design". *USC Animation – Visualizing Art and Science* 17 September 2007. http://uscanimation-artandscience.blogspot.com/2007_09_01_archive.html.
8. Fordham, J. "War of the Worlds: Alien Apocalypse". *Cinefex* October 2005. 103. Pp. 66-87. Print.
9. Duberman, D. "Spectrum Reviews: SIGGRAPH 2005." *Spectrum: Interactive Media & Online Developer News* 29 August 2005. http://www.3dlinks.com/spectrum/issues/spectrum-aug-29-05.cfm
10. Duncan, J. "Van Helsing: Man Made Monsters". *Cinefex* July 2004. 98. Pp. 98-124. Print.
11. Mallory, M. "Feel Their Pain: 'Van Helsing' Brings Creature Feature Standbys Up to Date". *Los Angeles Times* 6 May 2004. http://articles.latimes.com/2004/may/06/news/wk-movies6
12. Gross, E. "Die Monsters Die". *CFQ Cinefantastique* April-May 2004. 34. Pp. 34-40, 70-71. Print.
13. Munson, B. "Men In Black II: Building a Better Pug". *Cinefex*. October 2002. 91. Pp. 82-111. Print.
14. Ford, M., Lehman, A. "An Interview with Tim McLaughlin". *Inspired 3D Character Setup*. Premier Press. Pp. 251. 2002. Print.
15. Deckel, L. "Jurassic Park III: Bigger, Faster, Meaner". *Cinefex*. October 2001. 87. Pp. 15-40,125-132. Print.
16. Robertson, B. "Raptor Redux: ILM Revitalizes the Raptors, T Rexes, and Other Digital Dinos in Jurassic Park III". *Computer Graphics World* August 2001. Pp 44-49. Print.
17. Staff, "Learning to Work Magic with Light". *BBC News* 28 May 2000. http://news.bbc.co.uk/2/hi/uk_news/education/765911.stm

18. Cannell, M. "Brain Drain: Young Architects Are Fleeing the Studio to Build in the Virtual World". *Architecture* December 1999. Pp 125-127. Print.
19. Cohen, K. "The Animated Side of Star Wars: An Interview with Rob Coleman, The Film's Animation Director". *Animation World Magazine*. August 1999. 4.5. http://www.awn.com/mag/issue4.05/4.05pages/cohenwars.php3
20. Robertson, B. "Star Wars Super Models." *Computer Graphics World* July 1999. Pp 39-44. Print.
21. Duncan, J., Martin, K. H., Cotta Vaz, M. "The Phantom Menace: Hero's Journey". *Cinefex*. July 1999. 78. Pp. 74-145. Print.
22. Parisi, P. "Effects Force: Conjuring 'The Phantom Menace' Required New Tools and a New Approach to Filmmaking." *The Hollywood Reporter Summer Special Effects Special Issue* 18-24 May 1999. S-12-15. Print.
23. Stack, P. "The Digital Divide: 'Phantom Menace' Pushes Moviemaking Into a Realm Dominated by the Computer," *The San Francisco Chronicle* 19 May 1999, sec. E: 1+. Print.
24. Jones, K. "Viz Kids." *Texas Monthly*. Dec. 1996. Print.
25. Cotta Vaz, M. "Mars Attacks!: Martial Art". *Cinefex*. December 1996. 68. Pp. 70-93. Print.
26. Kunde, D. "Aggies in Wonderland." *The Dallas Morning News* 3 July 1996, sec. D: 1+. Print.
27. Pelline, J. "Creating the Wild Kingdom: How Computers are Redrawing the Movie Landscape." *The San Francisco Chronicle* 11 December 1995, sec. B: 1+. Print.
28. Pourroy, P. "Jumanji: The Game Board Jungle". *Cinefex*. December 1995. 64. Pp. 54-71. Print.
29. *SIGGRAPH Video Review, Issue 102: SIGGRAPH 94 Screening Room Entertainment and Commercial Program*, "Dream Dweller". 1994. Video.
30. Pocock, L. "The Animation Screening Room SIGGRAPH 94" *Computer Graphics* February 1995. Pp 25-26. Print.

III. Teaching and Advising

A. Fields Qualified to Teach

- Technical animation – specifically, motion systems, control systems, deformation systems, and artistic control over soft-body and rigid-body dynamics.
- Computer graphics animation production.
- Computer graphics visual effects production.
- Animation – specifically, form and motion inspired by nature.

B. Courses Taught

- Spring 2012:
  1. VIST 406 – Visual Studies Studio IV (15 students)
  2. VIZA 615 – Computer Animation (27 students)
  3. VIZA 691 – Thesis Research (3 students)
  4. VIZA 691 – Thesis Research in Absentia (4 students)
- Fall 2011:

1. VIST 491 – Undergraduate Research (10 students)
2. VIZA 685 – Directed Study (3 students)
3. VIZA 691 – Thesis Research (1 students)
4. VIZA 691 – Thesis Research in Absentia (4 students)

- Spring 2011:
  1. VIST 406 – Visual Studies Studio IV (12 students)
  2. VIZA 685 – Directed Study (1 student)
  3. VIZA 691 – Thesis Research (3 students)
  4. VIZA 691 – Thesis Research in Absentia (4 students)
- Fall 2010:
  1. VIZA 615 – Computer Animation (9 students)
  2. VIZA 685 – Directed Study (2 students)
  3. VIZA 691 – Thesis Research (4 students)
  4. VIZA 691 – Thesis Research in Absentia (5 students)
- Summer 2010:
  1. VIZA 685 – Directed Study (1 student)
  2. VIZA 691 – Thesis Research (3 students)
  3. VIZA 691 – Thesis Research in Absentia (1 student)
- Spring 2010:
  1. VIST 406 – Visual Studies Studio IV (8 students)
  2. VIZA 685 – Directed Study (2 students)
- Fall 2009:
  1. VIST 305 – Visual Studies Studio II (13 students)
- Summer 2009:
  1. VIZA 685 – Directed Study (1 student)
  2. VIZA 691 – Thesis Research (4 students)
- Spring 2009:
  1. VIZA 615 – Computer Animation (19 students)
  2. VIZA 685 – Directed Study (3 students)
  3. VIZA 691 – Thesis Research (7 students)
  4. VIZA 691 – Thesis Research in Absentia (2 students)
- Fall 2008:
  1. VIST 305 – Visual Studies Studio II (21 students)
  2. VIZA 691 – Thesis Research (6 students)
  3. VIZA 691 – Thesis Research in Absentia (1 student)
- Spring 2008:
  1. VIZA 615 – Computer Animation (15 students)
  2. VIZA 685 – Directed Study (1 student)
  3. VIZA 691 – Thesis Research (3 students)

C. Graduate Student Mentoring, Committee Chair, M.S. in Visualization

1. Davalath, Megha. Thesis title: "A Rigging Solution for Isosurface Based Characters". Graduated May 2011. Currently employed by DreamWorks Animation, Glendale, California.
2. Drell, David. Proposed thesis: "A System for Designing Digital Creatures Based on Rules of Vertebrate (Tetrapodal) Anatomical Structure". Expected graduation date: Summer 2012. Currently employed by DreamWorks Animation, Glendale, California.

3. Fleming, Alex. Proposed thesis: "Automated Hand-held Camera Animation". Expected graduation date: August 2012. Currently employed by Digital Domain, Larkspur, California
4. Gibbs, James. Tentative thesis topic: 3D representation of black and white still photography. Expected graduation date: Summer 2012. Currently employed by Atomic Pictures, San Rafael, California.
5. Griffin, Chris. Thesis title: "Scripted Vehicle Rigging and Animation: A Maxscripting Approach", graduated December 2010. Currently employed by Pixar Animation Studios, Emeryville, California.
6. Hagan, Landon. Tentative thesis topic: real-time monitoring of character rigs during animation. Expected graduation date: December 2012. Currently full-time student, Texas A&M University.
7. Howard, Heather. Thesis title: "Group Based Rigging for Realistic Feathered Wings". Graduated December 2011.
8. Kelly, Logan. Tentative thesis topic: physically-based rigging, expected graduation date: December 2012. Currently full-time student, Texas A&M University.
9. Keske, Stephanie. Tentative thesis topic: visual style development for educational 3D animations. Expected graduation date: December 2012. Currently full-time student, Texas A&M University.
10. McLendon, Meredith. Proposed thesis title: "Using Eye Tracking to Investigate Important Cues to Achieve A Minimal Representation for Creature Motion". Expected graduation date: August 2012.
11. Naugle, Nicholas. Thesis title: "Conceptualization of a Animation Production Management System Based upon Building Information Modeling (BIM)". Graduated December 2011. Currently employed by Pixar Animation Studios, Emeryville, California.
12. Peña, B. Adán. Thesis title: "Automatic Quadrupedal Rig Generation from Single Camera Motion Data". Graduated May 2011. Currently employed by DreamWorks Animation, Glendale, California.
13. Schwartz, Seth. Proposed thesis: "Motorized Joints and Generative Implementations". Expected graduation date: May 2012. Currently full-time student at Texas A&M University.
14. Speer, Jon. Proposed thesis: "Camera Dependent Squash and Stretch". Expected graduation date: August 2012. Currently employed by Reel FX Entertainment, Dallas, Texas.
15. Wheeler, Christopher R. Thesis title: "An Automated System for the Creation of Articulated Mechanical Parts". Graduated December 2009. Currently employed by PDI/DreamWorks Animation, Redwood City, California.
16. Zhou, Junze. Tentative thesis topic: physically-inspired cartoon dynamics. Expected graduation date: December 2012. Currently full-time student, Texas A&M University.

D. Graduate Student Mentoring, as Committee Member

1. Bell, Douglas R. Degree: Master of Science in Visualization. Chair: Karen Hillier. Thesis title: "Using Precisionism within American Modern Art as Stylistic Inspiration for 3D Digital Works". Graduated August 2009. Currently employed by Reel FX Creative Studios, Dallas, Texas.
2. Chandy, Ranjith. Degree: Master of Science in Visualization. Chair: Dr. Ergun Akleman. Thesis title: "Adapting the Symbolization of the Indian God Yama in the Style of Tim

Burton". Graduated August 2011. Currently employed by Bouncing Pixel, Houston, Texas.

3. Cureton, Spencer. Degree: Master of Science in Visualization. Chair: Dr. Ann McNamara. Tentative thesis topic: procedural generation of quadrupedal gaits. Expected graduation date: December 2012. Currently full-time student, Texas A&M University.
4. Eggebrecht, Jack. Degree: Master of Science in Visualization. Chair: Dr. Ann McNamara. Tentative thesis topic: video game development for education. Expected graduation date: May 2013. Currently full-time student at Texas A&M University.
5. Huebel, Robert. Degree: Master of Science in Visualization. Chair: Philip Galanter. Proposed thesis: "Interactive Camera Motion Control in a Virtual Environment Using a Physical Camera: Adding a Human Touch to CG Camerawork". Expected graduation date August 2012. Currently employed by DreamWorks Animation, Glendale, California.
6. Pool, Julie. Degree: Master of Science in Visualization. Chair: Dr. Louis G. Tassinary. Proposed thesis: "Designing an Optimized Notation System of Movement for Animation," Expected graduation date: December 2011. Currently full-time student at Texas A&M University.
7. Simms, Michelle. Degree: Doctor of Philosophy, Curriculum & Instruction. Chair: Dr. Stephen Carpenter. Dissertation: "The Development of an Academically-Based Entertainment-Education (ABEE) Model: Co-Opting Behavioral Change Efficacy of Entertainment-Education for Academic Learning Targeting the Societal Landscape of U.S. Geographic Illiteracy". Graduated: December 2011. Currently employed by the School of Communications, Regent University.
8. Weissenstein, Stefan. Degree: Master of Architecture. Chair: Robert Warden. Thesis project: "Conceptualization for Expansion of St. Mary's Catholic Church, College Station, Texas." Master of Architecture, Texas A&M University. Graduated: May 2009. Currently employed by the US Army Corps of Engineers, Dallas, Texas.

IV. Service

A. To the Department of Visualization

As of the spring 2012 semester the Department of Visualization consists of 14 full-time faculty members (12 tenured/tenure-track, 2 senior lecturers, 4 visiting/adjunct faculty) and 5 full-time staff members. The department is multi-disciplinary. The faculty's fields of scholarship and teaching include computer graphics, computer-aided geometric design and modeling, environmental psychophysiology, game design & development, generative art, graphic design, interactive installations, neuroscience, photography, physical computing, time-based media, traditional and digital painting, and visual perception. Three staff members are devoted full time to administering to the physical and computing resources of the department, and two staff members are devoted full time to department administration and academic affairs.

The department is home to three academic programs: the Bachelor of Science in Visualization (approximately 195 students); the Master of Science in Visualization (approximately 85 students), and the Master of Fine Arts in Visualization (approximately 6 students).

The department is also home to the Visualization Laboratory. The mission of the Viz Lab is to meet the resource related needs of the academic and research programs of the department. More information about the department can be found at: http://www.viz.tamu.edu.

Administrative Duties in Service to the Department

- Department Head, January 2008 – Present.
- Chair, Department of Visualization Staff and Student Representatives Committee, August 2008 – December 2009.
- Chair, Faculty Search Committee, Department of Visualization, October 2007 – May 2008. Responsible for hiring three tenure track faculty new to the department and university beginning with appointments in Fall 2009.
- Significant Accomplishments:
  1. First department head of the Department of Visualization.
  2. Wrote and established departmental policies
     i. Faculty Workload Policy
     ii. Annual Review Policy.
  3. Authorship of significant documents defining the department
     i. Primary author of Department of Visualization Research Landmarks, Fall 2008.
     ii. Organizing author to Department of Visualization Strategic Plan 2011-2015.
     iii. Contributing author to Department of Visualization Risk Assessment Survey, Spring 2009 – Fall 2009.
  4. Maintenance and management of resources required for the fulfillment of the mission of the Visualization Laboratory.

Administration Duties in Service to Graduate Programs

- Course scheduling, teaching assignments, and assignment of graduate assistants.
- Student success, including learning outcomes, curriculum management, matriculation, and welfare.
- Significant accomplishments:
  1. Contributing author, Assessment Mission, Goals, and Measures for the Master of Science in Visualization program, August 2008 – Present.
  2. Initiated and completed request to Texas Higher Education Coordinating Board for a Classification of Instructional Programs (CIP) code change from Multi-/Interdisciplinary Studies, Other (30.9999.09) to 11.0803.00 Computer Graphics (a STEM code).
  3. Contributing author to the proposal to create a Master of Fine Arts in Visualization degree program. Approved November 2011 by the Texas Higher Education Coordinating Board. The MFA-Visualization is the first MFA degree offered at Texas A&M University.

Administration Duties in Service of Undergraduate Programs

- Course scheduling, teaching assignments, and assignment of graduate assistants.
- Student success, including learning outcomes, curriculum management, matriculation, and welfare.
- Significant accomplishments

- Responsible for course scheduling, teaching assignments, and assignment of graduate assistants.
- Responsible for curriculum, resources, and student welfare in the Bachelor of Science in Visualization program (average 185 enrolled students per year) and the Art Minor (average 55 enrolled students per year). Master of Fine Arts in Visualization programs (95 students in Fall 2011 semester).
- Significant Accomplishments
    1. Primary author, Proposal to Initiate the B.S. in Visualization Program, Spring 2008. The BS in Visualization is the first STEM degree in the College of Architecture.
    2. Contributing author, Assessment Mission, Goals, and Measures for the Bachelor of Science in Visualization program, August 2008 – Present.
    3. Contributing author in the establishment of the Art Minor, Spring 2010.
    4. In October 2011, the B.S. in Visualization became the first undergraduate program at Texas A&M University to fill its Fall 2012 freshmen class.

Development & Outreach

- Developed the ***Visualize the Border*** initiative to engage middle- and high-school students along the Texas/Mexico border in the pursuit of academic aspirations that will lead to careers in the game, animation, visual effects, and media industries. Completed a first trip to the area by visiting approximately 300 students at three high schools and one junior high in Laredo, Texas in April 2011. Traveled for two days with Sergio Rosas, owner of CGBot of Austin, Texas and Monterrey, Mexico to make the presentations. Access to the schools and community was made possible through Dr. Jorge Vanegas and Oscar Munoz of Texas A&M University's Center for Housing and Urban Development.
- Developed ***VizKids Camp*** as an initiative to introduce middle school-age students to the opportunities made possible through pursuit of arts, mat, sciences and technology in high school. Camps have been held in the summer of 2010 and 2011 with a total of 35 students participating. The week-long live-in camp was managed by Associate Professor Carol LaFayette with help from GirlStart in 2010. In 2011 the camp was managed by Youth Adventure Programs. Including 2012 commitments, the Texas Film Commission has, to date, provided $15,000 in support of the camp. The 2012 VizKids Camp will expand to two sessions with overall management by YAP and departmental supervision provided by Associate Professor Howard Eilers.
- Organized and Chair the ***Visualization Industry Partners*** (VIP) program, beginning in Fall 2008. The VIP group meets twice a year on campus at Texas A&M University and is charged with providing insights and feedback to the Department of Visualization regarding quality of the academic programs and directions of the visualization associated industries (animation, visual effects, simulation, architectural/engineering visualization, graphic design, and games). VIP members include: Blue Logic LLC (Dallas), CGBot (Austin, TX), DreamWorks Animation Studio (Glendale and Redwood Shores, CA), Electronic Arts (Orlando, FL), HKS, Inc (Dallas), Pixar Animation Studios (Emeryville, CA), Presagis, USA (Richardson, TX), Reel FX Creative Studios (Dallas), Sony Pictures Imageworks (Culver City, CA), and Walt Disney Animation Studios (Burbank, CA). To date, the VIP group has donated $17,000 in support of the department.
- Contributed to the organization of ***Art 2.0 Symposium*** focusing on raising community awareness of the Department of Visualization's current and potential role in shaping contemporary digitally infused art forms. This gathering played an important role in

raising the community's awareness of the department's contributions to the visual arts and in guiding the development of the MFA-Visualization program proposal.

- Led the Department's successful application to join ***IPAX, Sony Pictures Imageworks Professional Academic Excellence*** program in 2008. Since that time three MS-Visualization students have won scholarships through IPAX totaling over $35,000.
- Led the Department's effort to join the ***Academy of Motion Pictures Arts & Sciences internship program***. In the summer following our connection, PhD in Architecture student Qing Xing won a competitive AMPAS sponsored internship in the R&D department at Rhythm & Hues studio.
- Organized and initiated from the industry side, while at ILM, the first **Summer Industry Production Course** in 2000. Contributed again in 2003 to ILM's partnership in the course. The industry production course has become a highly acclaimed and affective feature of the MS-Visualization program. Industry partners donate 5-6 weeks of artist time to visit Texas A&M each summer as guest instructors.
- Organized and initiated the ***Aggie Alumni at ILM/Lucasfilm Award*** in 1997 as an employee at Industrial Light & Magic. This on-going award was the first scholarship for students in the Master of Science in Visualization Sciences program. There are now two other scholarships arranged following the same model at Pixar Animation Studios, and DreamWorks Animation, respectively.
- Coordinated the review and donation of the **Pixar Aggies Scholarship** to coincide with each Viz-a-GoGo, the end of the year exhibition of student work from the MS-Visualization program (2008-Present).
- Worked with former students now at **DreamWorks Animation Scholarship** to establish an annual scholarship to coincide with each Viz-a-GoGo, the end of the year exhibition of student work from the MS-Visualization program.
- Worked with Larry Zuber, Development Officer for the College of Architecture, to establish the annual **Thomas Family Scholarship**, donated by Andre Thomas and matched by Electronic Arts.

B. Interdepartmental

- Initiated and Co-Chair, with the Head of the Department of Computer Science and Engineering, the *Joint Committee on Computer Graphics Initiatives*, Fall 2009 – 2011.
- Contributor as speaker, Texas Governor's School: Arts & Humanities for Urban Leadership, 24 June 2009.
- Creative Director with Dr. Dennie Smith (Producer), Head of the Department of Teaching Learning & Culture on a student-developed animation project for the Texas Education Agency's effort to introduce changes in the Texas Essential Knowledge and Skills program to state-wide K-12 teachers. Fall 2010.

C. To the College of Architecture

- Chair, Search Committee for the Head of the Department of Architecture, Fall 2011.
- Member, College Leadership Team, College of Architecture, April 2009 – Present.
- Associate Department Head and Chair of the Visualization Faculty, Department of Architecture, August 2007 – December 2007.
- Member, Executive Committee, College of Architecture, August 2007 – April 2009.
- Member, Department Head Council, College of Architecture, August 2007 – April 2009.
- Member, College IT Committee, August 2007 – January 2008.
- Member, Dean's External Advisory Board, College of Architecture, Texas A&M University, 2004-2007.

- Contributing author, Proposal for the creation of a center for visualization, August 2009 – Present.
- Contributor, College of Architecture Faculty Salary Equity Review, Spring 2009 – August 2009.
- Presenter, *Parents Weekend*, Texas A&M University, 2008-2012.
- Presenter, *Aggieland Saturday*, Texas A&M University, 2008-2012.
- Organizer and host of the College of Architecture's information table at the *Spend a Day with the Corps* program; Sam Houston Sanders Corps of Cadets Center, Summers 2009-2011.

D. To the University

- Panelist, New Academic Leaders Orientation, Dean of Faculties and Associate Provost Office, Fall 2011.
- Member, Task Force for Campus Arts Programs, November 2009 – May 2010.
- Member, CTE Portal Task Force, October 2009 – 2011.
- Invited Participant, University Research Roadmap Multidisciplinary Research Initiative: Institute for Digital Humanities, Media and Culture, November 2009 – Present.
- Member, College of Architecture Dean Search Committee, November 2008 – May 2009.
- Representative of Texas A&M University at the "Meet Texas Luncheon with Governor Rick Perry", Reel FX Creative Studio, Santa Monica, California, November 19, 2010.

E. To the Profession and Community

- Member, Board of Directors, Visual Effects Society, January 2009 – Present. International in scope, the VES is the only organization representing the full breadth of visual effects practitioners in all areas of entertainment from film, television and commercials, music videos and games. More information about the VES is available at http://www.visualeffectssociety.com/. A listing of the membership of the VES Board of Directors can be found here: http://www.visualeffectssociety.com/about/board-directors. I am currently the only full member of the board from academia.
- Member, Advisory Committee for Game On! Texas symposium, Fall 2009 – Present. Regional to Texas; involves policy makers, industry, and educators. Information about the 2010 and 2011 Game On! Texas symposia can be found here: http://governor.state.tx.us/news/press-release/14462/ and here: http://www.amd.com/us/press-releases/Pages/keynote-game-on-2011feb16.aspx, respectively.
- Member, Advisory Committee for the Games Education Summit, 2008. National in scope.
- Contributing instructor, Visualization Summer Workshop for K-12 Teachers, Summer 2009. Regional to Texas.
- External reviewer for promotion to Professor for Maria Palazzi, Associate Professor, The Ohio State University's Department of Design, Fall 2011.
- Book chapter reviewer: Kitagawa, M., Windsor, B. "Mocap for Artists: Workflow and Techniques for Motion Capture", selected chapters. Elsiver, Inc. 2008. Print.
- Curriculum reviewer: Diploma in Advanced Animation, Lifeway College, Snells Beach, Rodney, New Zealand.

I, Tim McLaughlin, certify that this curriculum vita represents the most current and correct information regarding my professional career as of the date listed below.

Signed: _____ Date: _____