

# Adam W. Bargteil

Computer Science and Electrical Engineering  
University of Maryland, Baltimore County  
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Baltimore, MD 21250

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URL: <http://www.csee.umbc.edu/~adamb>

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## Research Interests

Computer Animation, Computer Graphics, Simulation, Machine Learning, Scientific Computing.

## Education

**University of California**, Berkeley, CA

Doctor of Philosophy in Computer Science, December 2006.

Dissertation Title: *Tracking and Texturing Liquid Surfaces*.

Committee: James O'Brien (advisor), Jonathan Shewchuk, John Strain, and Carlo Sequin.

Minor in Mathematics.

**University of Maryland**, College Park, MD

Bachelor of Science in Computer Science, 2000.

Bachelor of Science in Mathematics, 2000.

Graduated Magna Cum Laude (GPA 3.94) with High Honors in Computer Science.

Advisors: Dana Nau (AI) and Bill Gasarch (Theory).

## Employment History

**Assistant Professor**

University of Maryland, Baltimore County

July 2015 – Present

Baltimore, MD

**Assistant Professor**

University of Utah

July 2008 – June 2015

Salt Lake City, UT

**Postdoctoral Fellow** (Mentor: Jessica Hodgins)

Carnegie Mellon University

August 2006 – July 2008

Pittsburgh, PA

Conducted research in physically based and data-driven computer animation techniques.

**Consultant**

PDI/DreamWorks

May 2005 – August 2007

Redwood City, CA

Worked in the research and development group developing fluid simulation and surface reconstruction tools for use in the production of feature films.

**Graduate Student Researcher** (Advisor: James O'Brien)

Computer Science Department, University of California

May 2001 – August 2006

Berkeley, CA

Conducted research on the use of physically based modeling techniques for computer animation.

**Software Engineer**

Science Applications International Corporation (SAIC)

May 1998 – August 2000 (intermittent)

McLean, VA

Worked on an internal research and development project, writing JAVA wrappers for kerberos functions using the JAVA native interface.

<b>Software Engineer</b> Great Game Products Helped develop the former world-champion bridge-playing computer program.	February 1998 – January 2000 (intermittent) Potomac, MD
<b>Computer Science Trainee</b> National Institute for Standards and Technology (NIST) Explored the then-emerging XML standard.	May – August 1997, January 1998 Gaithersburg, MD

## Honors & Awards

**Best Student Paper Award**, ACM SIGGRAPH Motion in Games, 2013.  
**Best-paper Award**, ACM SIGGRAPH/Eurographics Symposium on Computer Animation, 2012.  
**Siebel Scholar**, 2005-2006.  
**California Microelectronics Fellowship**, 2000-2001.  
**Honorable Mention, NSF Graduate Research Fellowship**, 2000, 2002.  
**Upsilon Pi Epsilon**, inducted Fall 2000.  
**Member of the Gemstone Program**, 1996-2000. An elite subset of the University Honors program.  
**Banneker-Key Scholar**, 1996-2000. University of Maryland, College Park.  
**Maryland Distinguished Scholar**, 1996-2000.  
**Advanced Placement National Scholar**, 1996.

## Publications & Colloquia

### Journal Articles

Xiaokai Li, Sheldon Andrews, Ben Jones, and Adam W. Bargteil. “**Energized Rigid Body Fracture.**” In *Proceedings of the ACM on Computer Graphics and Interactive Techniques*. May 2018, Vol. 1, No 1.

Ben Jones, Nils Thuerey, Tamar Shinar, Adam W. Bargteil. “**Example-based Plastic Deformation of Rigid Bodies.**” In *ACM Transactions on Graphics (SIGGRAPH 2016)*, July 2016, Vol. 35, No 4.

Haimasree Bhattacharya, Yue Gao, and Adam W. Bargteil. “**A Level-set Method for Skinning Animated Particle Data.**” In *IEEE Transactions on Visualization and Computer Graphics*, March 2015, Vol. 21, No. 3.

Ben Jones, Jovan Popovic, Jim McCann, Wilmot Li, and Adam W. Bargteil. “**Dynamics Sprites: Artistic Authoring of Interactive Animations.**” In *Computer Animation and Virtual Worlds*, March/April 2015, Vol. 26, No. 2.

Dan Gerszewski, Peter-Pike Sloan, Ladislav Kavan, and Adam W. Bargteil. “**Basis Enrichment and Solid-fluid Coupling for Model-reduced Fluid Simulation.**” In *Computer Animation and Virtual Worlds*, March/April 2015, Vol. 26, No. 2.

Adam Bargteil and Elaine Cohen. “**Animation of Deformable Bodies with Quadratic Bézier Finite Elements.**” *ACM Transactions on Graphics*, May 2014, Vol. 33, No. 3.

Ben Jones, Stephen Ward, Ashok Jallepalli, Joseph Parenia, and Adam W. Bargteil. “**Deformation Embedding for Point-Based Elastoplastic Simulation.**” *ACM Transactions on Graphics*, March 2014, Vol. 33, No. 2.

Marek Krzysztof Misztal, Kenny Erleben, Adam W. Bargteil, Jens Fursund, Brian Bunch Christensen, Andreas Baerentzen, and Robert Bridson. “**Multiphase Flow of Immiscible Fluids on Unstructured Moving Meshes.**” *IEEE Transactions on Visualization and Computer Graphics*, January 2014, Vol. 20, No. 1.

Dan Gerszewski and Adam W. Bargteil. “**Physics-based Animation of Large-scale Splashing Liquids.**” *ACM Transactions on Graphics (SIGGRAPH ASIA 2013)*, November 2013, Vol. 32, No. 6.

Tiantian Liu, Adam W. Bargteil, James F. O’Brien, and Ladislav Kavan. “**Fast Simulation of Mass-Spring Systems.**” *ACM Transactions on Graphics (SIGGRAPH ASIA 2013)*, November 2013, Vol. 32, No. 6.

Ladislav Kavan, Dan Gerszewski, Adam W. Bargteil, and Peter-Pike Sloan. “**Physics-Inspired Upsampling for Cloth Simulation in Games.**” *ACM Transactions on Graphics (SIGGRAPH 2011)*, August 2011, Vol 30, No. 4.

Ladislav Kavan, Adam W. Bargteil, and Peter-Pike Sloan. “**Least Squares Vertex Baking.**” *Computer Graphics Forum (Eurographics Symposium on Rendering)*, June 2011, Vol 30, No. 4.

Adam W. Bargteil, Chris Wojtan, Jessica K. Hodgins, and Greg Turk. “**A Finite Element Method for Animating Large Viscoplastic Flow.**” *ACM Transactions on Graphics (SIGGRAPH 2007)*, August 2007, Vol. 26, No. 3.

Adam W. Bargteil, James F. O’Brien, Tolga G. Goktekin, and John A. Strain. “**A Semi-Lagrangian Contouring Method for Fluid Simulation.**” *ACM Transactions on Graphics*, January 2006, Vol. 25, No. 1. (Recommended to TOG by the SIGGRAPH 2005 papers committee. Front cover image.)

Tolga G. Goktekin, Adam W. Bargteil, and James F. O’Brien. “**A Method for Animating Viscoelastic Fluids.**” *ACM Transactions on Graphics (SIGGRAPH 2004)*, August 2004, Vol. 23, No. 3.

James F. O’Brien, Adam W. Bargteil, and Jessica K. Hodgins. “**Graphical Modeling and Animation of Ductile Fracture.**” *ACM Transactions on Graphics (SIGGRAPH 2002)*, July 2002, Vol. 21, No. 3.

## Refereed Conference Papers

Aditya Viswanathan Kaliappan and Adam W. Bargteil “**Multi-resolution Clustering for Enhanced Elastic Behavior in Clustered Shape Matching.**” In the proceedings of *ACM SIGGRAPH Motion, Interaction and Games*. Virtual, October 2020.

Qingyuan Zheng, Zhuoru Li, and Adam Bargteil. “**Learning to Shadow Hand-drawn Sketches.**” In the proceedings of *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*. Virtual, June 2020.

Alex Dahl and Adam W. Bargteil. “**Global Momentum Preservation for Position-based Dynamics.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Newcastle Upon Tyne, England, October 2019.

Alex Dahl and Adam W. Bargteil. “**Early Termination of Conjugate Gradients for Corotated Finite Elements.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Newcastle Upon Tyne, England, October 2019.

Michael Falkenstein, Ben Jones, Joshua A. Levine, Tamar Shinar, and Adam W. Bargteil. “**Reclustering for Large Plasticity in Clustered Shape Matching.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Barcelona, Spain, November 2017.

Ben Jones, Joshua A. Levine, Tamar Shinar, and Adam Bargteil. “**Efficient Collision Detection for Example-Based Deformable Bodies.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Barcelona, Spain, November 2017.

Ben Jones, April Martin, Joshua A. Levine, Tamar Shinar, and Adam Bargteil. “**Ductile Fracture for Clustered Shape Matching.**” In the proceedings of *ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games*. Redmond, Washington, February 2016.

Ben Jones, April Martin, Joshua A. Levine, Tamar Shinar, and Adam Bargteil. “**Clustering and Collision Detection for Clustered Shape Matching.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Paris, France, November 2015.

Adam W. Bargteil and Ben Jones. “**Strain Limiting for Clustered Shape Matching.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Los Angeles, California, November 2014. **Best Presentation Award.**

Joshua A. Levine, Adam W. Bargteil, Christopher Corsi, Jerry Tessendorf, and Robert Geist. “**A Peridynamic Perspective on Spring-Mass Fracture.**” In the proceedings of *ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. Copenhagen, Denmark, July 2014.

Haimasree Bhattacharya, Joshua A. Levine, and Adam W. Bargteil. “**Fluid Simulation on Arbitrary Quadrilateral Surface Meshes.**” In the proceedings of *Structured Meshing: Theory, Applications, and Evaluation*. Houston, Texas, May 2014.

Ben Jones, Jovan Popovic, Jim McCann, Wilmot Li, and Adam W. Bargteil. “**Dynamics Sprites.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Dublin, Ireland, October 2013. **Best Student Paper Award** (extended version invited to Computer Animation and Virtual Worlds).

David A. Stuart, Joshua A. Levine, Ben Jones, and Adam W. Bargteil. “**Automatic Construction of Coarse, High-quality Tetrahedralizations that Enclose and Approximate Surfaces for Animation.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Dublin, Ireland, October 2013.

Dan Gerszewski, Peter-Pike Sloan, Ladislav Kavan, and Adam W. Bargteil. “**Enhancements to Model-reduced Fluid Simulation.**” In the proceedings of *ACM SIGGRAPH Motion in Games*. Dublin, Ireland, October 2013. (Extended version invited to Computer Animation and Virtual Worlds).

Marek Krzysztof Misztal, Kenny Erleben, Adam W. Bargteil, Jens Fursund, Brian Bunch Christensen, Andreas Baerentzen, and Robert Bridson. “**Multiphase Flow of Immiscible Fluids on Unstructured Moving Meshes.**” In the proceedings of *ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. Lausanne, Switzerland, July 2012. **Best-paper Award**

Haimasree Bhattacharya, Yue Gao, and Adam W. Bargteil. “**A Level-set Method for Skinning Animated Particle Data.**” In the proceedings of *ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. Vancouver, British Columbia, August 2011.

Dan Gerszewski, Haimasree Bhattacharya, and Adam W. Bargteil. “**A Point-based Method for Animating Elastoplastic Solids.**” In the proceedings of *ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. New Orleans, Louisiana, August 2009.

Funshing Sin, Adam W. Bargteil, and Jessica K. Hodgins. “**A Point-based Methods for Animating Incompressible Flow.**” In the proceedings of *ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. New Orleans, Louisiana, August 2009.

Ashley M. Eden, Adam W. Bargteil, Tolga G. Goktekin, Sarah Beth Eisinger, and James F. O’Brien. “**A Method for Cartoon-Style Rendering of Liquid Animations.**” In the proceedings of *Graphics Interface*. Montreal, Canada, May 2007.

Adam W. Bargteil, Funshing Sin, Jonathan E. Michaels, Tolga G. Goktekin, and James F. O’Brien. “**A Texture Synthesis Method for Liquid Animations.**” In the proceedings of *ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. Vienna, Austria, September 2006.

Yan Chen, Adam Bargteil, David Bindel, Randy H. Katz, and John Kubiawicz. “**Quantifying Network Denial of Service: A Location Service Case Study.**” In the proceedings of *Third International Conference on Information and Communications Security*. Xian, China, November 2001.

### SIGGRAPH Courses (juried and highly selective)

Adam W. Bargteil, Tamar Shinar, and Paul Kry. “**An Introduction to Physics-based Animation.**” In the Proceedings of *ACM SIGGRAPH ASIA Courses 2020*. Virtual, November, 2020.

Adam W. Bargteil and Tamar Shinar. “**An Introduction to Physics-based Animation.**” In the Proceedings of *ACM SIGGRAPH Courses 2019*. Los Angeles, CA, 2019.

Adam W. Bargteil and Tamar Shinar. “**An Introduction to Physics-based Animation.**” In the Proceedings of *ACM SIGGRAPH Courses 2019*. Vancouver, BC, 2018.

### SIGGRAPH Electronic Theater (juried and highly selective)

Adam W. Bargteil, Tolga G. Goktekin, James F. O’Brien, John A. Strain, and Cynthia Bruyns. “**A Semi-Lagrangian Contouring Method for Fluid Simulation.**” In the Visual Proceedings of *ACM SIGGRAPH 2005*. Los Angeles, California, August 2005. In the ACM SIGGRAPH 2005 Electronic Theater.

Okan Arikan, Adam W. Bargteil, Tolga G. Goktekin, James F. O’Brien, Chen Shen, and Sam Cusumano. “**Gratuitous Goop.**” In the Visual Proceedings of *ACM SIGGRAPH 2004*. Los Angeles, California, August 2004. In the ACM SIGGRAPH 2004 Electronic Theater.

James F. O’Brien, Adam W. Bargteil, Jessica K. Hodgins, and Sam Cusumano. “**Graphical Modeling and Animation of Ductile Fracture.**” In the Visual Proceedings of *ACM SIGGRAPH 2002*. San Antonio, Texas, July 2002. In the ACM SIGGRAPH 2002 Electronic Theater.

### Conversation Pieces

Adam W. Bargteil. “**‘Jurassic Park’ made a dinosaur-sized leap forward in computer-generated animation on screen, 25 years ago.**” June 2018.

Adam W. Bargteil. “**How ‘Bambi’ paved the way for both ‘Fallout 4’ and ‘Angry Birds’.**” August 2017.

### SIGGRAPH Technical Sketches

Adam W. Bargteil, Funshing Sin, Jonathan E. Michaels, Tolga G. Goktekin, and James F. O’Brien. “**A Texture Synthesis Method for Liquid Animations.**” In the proceedings of *ACM SIGGRAPH 2006*. Los Angeles, California, August 2006. **Technical Sketch.**

Adam W. Bargteil, Tolga G. Goktekin, James F. O’Brien, and John A. Strain. “**A Semi-Lagrangian Contouring Method for Fluid Simulation.**” In the proceedings of *ACM SIGGRAPH 2005*. Los Angeles, California, August 2005. **Technical Sketch.**

### Colloquia and Invited Talks

ISVC 2018: International Symposium on Visual Computing. **Computer Animation: Past, Present, and Future**, November 2018.

Bellairs Workshop on Computer Animation: Physically Based Methods. **What I’ve learned about Example-based Deformation and Clustered Shape Matching**, February 2017.

- Utah Valley University Math Week 2015 (Keynote Talk). **Movie Math**, March 2015.
- Rochester Institute of Technology. **Physics, Simulation, and Computer Animation**, March 2015.
- University of Maryland, Baltimore County. **Physics, Simulation, and Computer Animation**, March 2015.
- Computer Animation and Social Agents (Keynote Talk). **Computer Animation of Complex Materials**, May 2014.
- Clemson University. **Point-based Animation of Liquids, Solids, and Things in Between**, May 2013.
- Bellairs Workshop on Computer Animation: Physically Based Methods. **The Future of Physics in Animation**, February 2013.
- Denmark Technical University. **Finite Element Simulation of Elastoplastic Materials**, (PhD Course on the Deformable Simplicial Complex Method) August 2011.
- Denmark Technical University. **Animation with a Point: New Approaches to Point-based Animation**, December 2010.
- DreamWorks Animation SKG. **Animation with a Point: New Approaches to Point-based Animation**, May 2010.
- University of California at Berkeley. **Animation with a Point: New Approaches to Point-based Animation**, May 2010.
- Pixar Animation Studios. **Animation with a Point: New Approaches to Point-based Animation**, May 2010.
- Columbia University. **Animation with a Point: New Approaches to Point-based Animation**, May 2010.
- Bellairs Workshop on Computer Animation: Reduced Physics, Simulation, and Control. **Bézier Tetrahedra for Computer Animation**, February 2010.
- University of Utah. **Physics-based Animation with Points**, September 2009.
- Brigham Young University. **Physics-based Animation**, December 2008.
- University of Pennsylvania. **Modeling Materials and Visual Detail for Computer Animation**, April 2008.
- Rutgers. **Modeling Materials and Visual Detail for Computer Animation**, April 2008.
- University of Toronto. **Modeling Materials and Visual Detail for Computer Animation**, March 2008.
- University of Southern California. **Modeling Materials and Visual Detail for Computer Animation**, March 2008.
- University of California, Riverside. **Modeling Materials and Visual Detail for Computer Animation**, March 2008.
- University of Utah. **Modeling Materials and Visual Detail for Computer Animation**, February 2008.
- University of Pennsylvania. **Computer Animation of Visco-elasto-plastic Materials through Physical Simulation**, March 2006.

McGill University. **Computer Animation of Visco-elasto-plastic Materials through Physical Simulation**, March 2006.

Virginia Tech. **Computer Animation of Visco-elasto-plastic Materials through Physical Simulation**, February 2006.

PDI/DreamWorks. **A Method for Animating Viscoelastic Fluids**, November 2004.

## Teaching Experience

### UMBC Teaching Experience

<b>Instructor</b> CMSC 341: Data Structures	Spring 2021 UMBC
<b>Instructor</b> CMSC 435/634: Introduction to Computer Graphics	Fall 2020 UMBC
<b>Instructor</b> CMSC 341: Data Structures	Fall 2020 UMBC
<b>Instructor</b> CMSC 341: Data Structures	Spring 2020 UMBC
<b>Instructor</b> CMSC 435/634: Introduction to Computer Graphics	Fall 2019 UMBC
<b>Instructor</b> CMSC 341: Data Structures	Fall 2019 UMBC
<b>Instructor</b> CMSC 435/634: Introduction to Computer Graphics	Spring 2019 UMBC
<b>Instructor</b> CMSC 435/634: Introduction to Computer Graphics	Fall 2018 UMBC
<b>Instructor</b> CMSC 341: Data Structures	Fall 2018 UMBC
<b>Instructor</b> CMSC 491/691: Computer Animation	Fall 2017 UMBC
<b>Instructor</b> CMSC 435/634: Introduction to Computer Graphics	Spring 2017 UMBC
<b>Instructor</b> CMSC 435/634: Introduction to Computer Graphics	Fall 2016 UMBC
<b>Instructor</b> CMSC 491/691: Computer Animation	Spring 2016 UMBC
<b>Instructor</b> CMSC 435/634: Introduction to Computer Graphics	Fall 2015 UMBC

### Prior Teaching Experience

<b>Instructor</b> CS 2420: Computer Science II	Fall 2014 University of Utah
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<b>Instructor</b> CS 6665: Character Animation	Fall 2014, Fall 2011, Fall 2009 University of Utah
<b>Instructor</b> CS 6660: Physics-based Animation	Fall 2013, Fall 2010, Fall 2008 University of Utah
<b>Instructor</b> EAE 2420: Computer Science II	Spring 2014, Spring 2013, Spring 2012, Spring 2011, Spring 2010, Spring 2009 University of Utah
<b>Instructor</b> 15-467/15-869/53-880: Physical Simulation for Computer Animation	Fall 2007 Carnegie Mellon University

## External Service

Chair, ACM SIGGRAPH Executive Committee, September 2020 - September 2021  
 Chair-elect, ACM SIGGRAPH Executive Committee, September 2019 - September 2020  
 Director, ACM SIGGRAPH Executive Committee, September 2019 - September 2022  
 Director-at-Large, ACM SIGGRAPH Executive Committee, September 2016 - September 2019  
 Associate Editor, ACM Transactions on Graphics, Spring 2011 - Spring 2018  
 Associate Editor, Graphics Models, Spring 2010 - Summer 2012  
 NSF Panelist, 2019  
 Program Committee Member, ACM SIGGRAPH Motion in Games 2019  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2019  
 Technical Papers co-Chair, ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games 2018  
 NSF Panelist, 2018  
 Program Committee Member, ACM SIGGRAPH Motion in Games 2018  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2018  
 General co-Chair, ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games 2017  
 NSF Panelist, 2017  
 Program Committee Member, ACM SIGGRAPH Motion in Games 2017  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2017  
 Program Committee Member, SIGGRAPH 2017  
 Program Committee Member, ACM SIGGRAPH Motion in Games 2016  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2016  
 Program Committee Member, SIGGRAPH 2016  
 NSF Panelist, 2016  
 Program Committee Member, ACM SIGGRAPH Motion in Games 2015  
 Program Committee Member, SIGGRAPH Asia 2015  
 NSF Panelist, 2015  
 Program Committee Member, ACM SIGGRAPH Motion in Games 2014  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2014  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2013  
 Program Committee Member, SIGGRAPH Asia 2012  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2012  
 Program Committee Member, SIGGRAPH 2012  
 Technical Papers co-Chair, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2011  
 Program Committee Member, SIGGRAPH 2011  
 General Jury Member, SIGGRAPH 2011

Program Committee Member, SIGGRAPH Asia 2010  
 Posters Chair, ACM/Eurographics Symposium on Computer Animation 2010  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2010  
 General Jury Member, SIGGRAPH 2010  
 NSF Panelist, 2010  
 Program Committee Member, SIGGRAPH 2009  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2009  
 Program Committee Member, Pacific Graphics 2009  
 Program Committee Member, SIGGRAPH 2008  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2008  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2007  
 Program Committee Member, ACM SIGGRAPH/Eurographics Symposium on Computer Animation 2006  
  
 Paper reviewer for Siggraph, ACM Transactions on Graphics, Eurographics, IEEE Transactions on Visualization and Computer Graphics, The Visual Computer, Graphics Interface, Pacific Graphics, Image and Vision Computing Journal, and International Symposium on Computer and Information Sciences (ISCIS).  
 Technical Sketch reviewer for SIGGRAPH.  
 Course reviewer for SIGGRAPH.

Member of the graduate admissions committee, University of California, Berkeley (2005-2006).

## Internal Service

Computer Science Tenure-track Faculty Search Committee Member (UMBC, 2021)  
 Computer Science Lecturer/Professor of Practice Search Committee Member (UMBC, 2018, 2019, 2020)  
 ECEP Lecturer/Professor of Practice Search Committee Member (UMBC, 2019)  
 Graduate Admissions Committee Member (UMBC, Fall 2015 - present)  
 Curriculum Committee Chair (Utah, Fall 2010 - Fall 2014)  
 Computational Engineering and Science Steering Committee (Acting Director, Utah, Fall 2011 - Summer 2012)  
 College Council (Utah, Spring 2010 - Spring 2013)  
 Computational Engineering and Science Steering Committee (Associate Director, Utah, Fall 2009 - Fall 2011)  
 CS Colloquium (Utah, Fall 2009 - Spring 2010)  
 Faculty Search Committee Member (Digital Media Ustar, Utah, 2009-2011)  
 Graduate Admissions Committee Member (Utah, 2009, 2010, 2011, 2013)

## Advisory Committees

### Chair

#### Ph.D.

Alex Dahl  
 Yuping Zhang  
 Qingyuan Zheng  
 Ben Jones (Ph.D., University of Utah, Spring 2015)  
 Haimasree Bhattacharya (Ph.D., University of Utah, Summer 2014)  
 Dan Gerszewski (Ph.D., University of Utah, Spring 2014)

**M.S.**

Aditya Kaliappan (M.S. (thesis), Spring 2020)  
 Xiaokai Li (M.S. (project), Fall 2017)  
 Michael Falkenstein (M.S. (thesis), Summer 2017)  
 David A. Stuart (M.S., University of Utah, Fall 2012)  
 Stephen Ward (M.S. (thesis), University of Utah, Spring 2012)  
 Ashok Jallepalli (M.S. (CES), University of Utah, Spring 2012)  
 Joseph Perenia (M.S., University of Utah, Spring 2012)  
 Nicholas Rasband (B.S./M.S., University of Utah, Spring 2013)  
 Ryan McAlister (B.S./M.S., University of Utah, Fall 2011)  
 Jeremiah Darais (B.S./M.S., University of Utah, Spring 2011)  
 Tuyet Ngyuen (M.S. (CES), University of Utah)  
 Cable Thompson (M.S., University of Utah, Fall 2010)  
 Matt Stoker (M.S., University of Utah, Spring 2010)

**Undergraduates**

Alice Lawrie  
 April Martin (University of Utah)

**Member****Ph.D.**

Ari Blenkhorn (Ph.D., University of Maryland, Baltimore County, Fall 2018)  
 Mark Bolstad (Ph.D., University of Maryland, Baltimore County, Spring 2017)  
 Brad Loos (Ph.D., University of Utah, Fall 2014)  
 Jonathan Bronson (Ph.D., University of Utah, Fall 2014)  
 Harsh Bhatia (Ph.D., University of Utah, Fall 2014)  
 Varun Shankar (Ph.D., University of Utah, Spring 2014)  
 Morten Pol Engell-Nørregård (Ph.D., University of Copenhagen, Summer 2012)  
 Matt Berger (Ph.D., University of Utah, Summer 2012)  
 Marek Misztal (Ph.D., Denmark Technical University, Fall 2010)  
 Miklos Bergou (Ph.D., Columbia University, Spring 2010)  
 Margarita Bratkova (Ph.D., University of Utah, Spring 2009)

**M.S.**

Shashank Bukka (M.S., University of Maryland, Baltimore County, Fall 2019)  
 Mathew Eckert (M.S., University of Maryland, Baltimore County, Fall 2015)  
 Kendal Gifford (M.S., University of Utah)  
 Kai Yang (M.S. (CES), University of Utah)  
 Braden Robison (M.S. (CES), University of Utah, Spring 2013)  
 Jason Scott (M.S., University of Utah, Fall 2009)  
 Joonyong Ji (M.S., University of Utah, Fall 2009)  
 Murali Anagani (M.S., University of Utah, Fall 2009)  
 Rohan Madtha (M.S., University of Utah, Spring 2009)  
 John Meier (M.S., University of Utah, Spring 2009)

**Funding****Received**

<b>nVidia</b>	\$1,500
In-kind Graphics card donation program	
PI: Bargteil	12/2017

<b>Hrabowski Innovation Fund</b>	\$24,598
Virtual Reality Design for Science	
PI: Chen; Co-PIs: Olano, Bargteil	Start Date: 1/22/2016
<b>NSF</b>	\$1,886,979 (\$1,194,978 to Utah)
CGV: Large: Collaborative Research: Coupling Simulation and Mesh Generation using Computational Topology	
PI: Bargteil; Co-PIs: Pascucci, Levine, Shinar	Start Date: 8/15/2013
<b>NSF IIS-1249756</b>	\$99,999
EAGER Learning Upsampling Operators for Animation of Cloth and Fluids	
PI: Bargteil	Start Date: 8/16/2012
<b>NSF IIS-1045032</b>	\$100,000
EAGER (G&V): Exploring Morse Theoretic Tools for Automatic Mesh Generation and Simulation on Surfaces	
PI: Pascucci; Co-PI: Bargteil	Start Date: 9/1/2010
<b>NSF CNS-0855167</b>	\$391,200
II-NEW: The Utah Acquisition and Rapid Prototyping Laboratory	
PI: Bargteil; Co-PI: Cohen, Kirby, Silva	Start Date: 8/1/2009
<b>Gift from Adobe Systems Incorporated</b>	\$7,000
	Date: 9/2012
<b>Gift from Disney Interactive Research</b>	\$15,000
	Date: 9/2010
<b>Gift from Disney Interactive Research</b>	\$7,500
	Date: 1/2010