

Martin L. Demaine

Curriculum Vitæ

MIT Computer Science and Artificial Intelligence Lab
32 Vassar Street
Cambridge, MA 02139
USA

Tel: +1-617-253-7953; Fax: +1-617-258-5429
Email: mdemaine@mit.edu
URL: <http://martindemaine.org/>

Canadian and U.S. Citizen

POSITIONS HELD

2012–present	Robotic Engineer, Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology
2005–present	Angelika and Barton Weller Artist-in-Residence, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology
2002–present	Technical Instructor, Glass Lab, Department of Materials Science and Engineering, Massachusetts Institute of Technology
2001–present	Visiting Scientist, Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology
2008–2009	Visiting Professor, Ecole Polytechnique de Louvain, Université Catholique de Louvain, Belgium
1997–2001	Visiting Scholar, Department of Computer Science, University of Waterloo

TEACHING

Fall	2012–present	MIT Glass Lab, Glass Musical Instruments.
Summer	2012	Folding Glass, cotaught class during 3-week artist-in-residence, Pilchuck Glass School, Stanwood, Washington.
Fall	2011	MIT Glass Lab, Glass Sculpture Installations.
Spring	2011	MIT Glass Lab, Surface Design Techniques.
Fall	2010	MIT 6.849, Geometric Folding Algorithms: Linkages, Origami, Polyhedra (co-instructor). 39 MIT students.
Spring	2008	MIT 6.100, Experimental Glass Musical Instruments, with Erik Demaine.
IAP	2007	MIT 6.096, Knot Language: Recreating Inca Quipu/Khipu, with Erik Demaine and Jean-Jacques Quisquater.
IAP	2005	MIT IAP 6451, Junkyard Art: The Art of Recycling, with Jeff Smith, Justin Adams, and Erik Demaine.
Fall	2004	MIT 4.491, Form-Finding and Structural Optimization, with Barb Cutler, Erik Demaine, Simon Greenwold, Axel Kilian, and John Ochsendorf.
Spring	2004	MIT 4.493, 3-D Design Tools for Equilibrium: Exploring Gaudi’s World, with Barb Cutler, Erik Demaine, Axel Kilian, and John Ochsendorf.
IAP	2004	MIT IAP 5804, Building with Books, with Erik Demaine, Chris Dewart, Stephanie Hartman, Wendy Jacob, and John Ochsendorf.
Spring	2003–present	MIT Glass Lab, Beginner Class.

PUBLIC COLLECTIONS

- 2016 Mahoney Music Collection, University of South Dakota
- 2015 Origami House Colonia, Uruguay
- 2015 Walker Art Center, Minnesota
- 2015 Israeli Origami Center Collection
- 2015 Sandwich Glass Museum, Massachusetts
- 2015 John Simon Guggenheim Memorial Foundation
- 2015 Corning Inc., New York
- 2015 Charles River Museum of Industry & Innovation, Massachusetts

2015 Zuckerman Museum of Art, Georgia
 2015 Amateras Foundation, Bulgaria
 2014 Educational Museum of Origami in Zaragoza, Spain
 2014 Mesa Contemporary Arts Museum, Arizona
 2014 Center for Book Arts, New York
 2014 Museum of Science and Industry, Chicago
 2014 Kamm Teapot Foundation
 2014 McGill Bellairs Research Institute, Barbados
 2014 Centre College, Danville
 2014 MIT Kavli Institute, Massachusetts
 2013 Firelands Association for the Visual Arts, Ohio
 2013 Berkshire Museum, Massachusetts
 2013 The Art Museum, Kentucky
 2013 Williams Center for the Arts, Pennsylvania
 2013 Canadian Bookbinders and Book Artists Guild, Ontario
 2013 Decatur Arts Alliance, Georgia
 2013 Bank Street Arts, England
 2013 Jaffe Center for Book Arts, Florida
 2013 Independent Curators International
 2012 Jong Ie Nara Paper Museum, Korea
 2012 Pilchuck Glass School, Washington
 2012 Fuller Craft Museum, Massachusetts
 2011 Smithsonian American Art Museum, DC
 2010 MD Anderson Cancer Center, Texas (installation)
 2008 Museum of Modern Art (MoMA), New York City
 circa South Australian Museum, Australia
 1975 National Gallery of Canada, Canada
 Montreal Museum of Fine Arts, Canada
 Canadian Museum of Civilization, Canada
 Canadian Clay & Glass Museum, Canada
 Nova Scotia Museum, Canada
 New Brunswick Museum, Canada

EXHIBITIONS (SINCE 2000)

2016–2017	Origami House Colonia, Uruguay	(invitational)
2016–2015	<i>Guild of Book Workers: Vessel (traveling exhibit)</i> (catalog)	(juried)
	North Bennet Street School, Massachusetts	
	Anderson Academic Commons, Colorado	
	Kellogg Gallery, California	
	Cary Graphic Arts Collection, New York	
	Loganberry Books, Ohio	
2016	Phoenix Brighton Gallery, England	(invitational)
2016	Sharjah Art Foundation, United Arab Emirates	(invitational)
2016	Morgan Contemporary Glass Gallery, Pennsylvania	(invitational)
2016	Kent State University Museum, Ohio	(juried)
2016	Museum of Glass, Washington	(juried)
2015	Concord Art Association, Massachusetts (catalog)	(invitational)
2015	Mobilia Gallery, Massachusetts	(invitational)
2015	Nature in Art Museum, England	(invitational)
2015	Cape Cod Museum of Art	(juried)
2015	Arts Center East, Connecticut	(juried)

2015	Gallery North, New York	(invitational)
2015–2016	University of South Dakota, South Dakota	(juried)
2015	<i>All Things Considered VIII (traveling exhibit)</i> (catalog)	(juried)
	Fruitlands Museum, Massachusetts	
	The Grand Hand Gallery, Minnesota	
2015	Museum of Northwest Art, Washington	(invitational)
2015	Sandwich Glass Museum, Massachusetts (catalog)	(invitational)
2015	Textile Center, Minnesota	(juried)
2015	Charles River Museum of Industry & Innovation, Massachusetts	(invitational)
2015	Sofia National Museum of History, Bulgaria (catalog)	(juried)
2015	Yeiser Art Center, Kentucky	(juried)
2015	Minnesota Center for Book Arts, Minnesota	(juried)
2015	Jaffa Museum, Israel	(invitational)
2015	The Wichita Center for the Arts, Kansas	(juried)
2015–2016	Museum of Modern Art (MoMA), New York City	(invitational)
2015–2017	<i>Above the Fold (traveling exhibit)</i>	(invitational)
	Allentown Art Museum, Pennsylvania	
	Clay Center for the Arts & Sciences, West Virginia	
	Morikami Museum and Japanese Gardens, Florida	
	Longmont Museum & Cultural Center, Colorado	
	Japanese American National Museum, California	
	Hermitage Museum and Gardens, Virginia	
	Springfield Museums, Massachusetts	
2014–2015	Educational Museum of Origami in Zaragoza, Spain	(invitational)
2014–2015	Fuller Craft Museum, Massachusetts (catalog)	(invitational)
2014–2015	Mobilia Gallery, Massachusetts	(invitational)
2014–2015	Ethel Sergeant Clark Smith Gallery, Pennsylvania	(invitational)
2014	National Liberty Museum, Pennsylvania (catalog)	(invitational)
2014–2015	Zuckerman Museum of Art, Georgia (catalog)	(invitational)
2014	Pyramid Atlantic Art Center, Maryland	(juried)
2014	Mobilia Gallery, Massachusetts	(invitational)
2014	Mary Cornwell Gallery, North Carolina (catalog)	(juried)
2014–	Museum of Science and Industry, Illinois	(invitational)
2014	Morris Museum, New Jersey	(invitational)
2014–2015	The Canadian Clay and Glass Gallery, Canada	(invitational)
2014–2015	<i>Livres des Artistes D'aujourd'hui: Collaboration (traveling exhibit)</i>	(invitational)
	Wolfson Gallery of Art + Design, Florida	
	The Center for Book Arts, New York City	
2014	Affinity Gallery, Canada	(invitational)
2014	Alden B. Dow Museum of Science and Art, Michigan	(invitational)
2014	Fuller Craft Museum, Massachusetts	(juried)
2014	41 Cooper Gallery, New York City	(juried)
2014	Museum Rijswijk, Netherlands (catalog)	(juried)
2014	Mesa Contemporary Arts Museum, Arizona	(invitational)
2014	Morgan Contemporary Glass Gallery, Pennsylvania	(invitational)
2014	Bridgewater State University, Massachusetts	(invitational)
2014	MIT Kavli Institute, Massachusetts	(juried)
2014	Duncan McClellan Gallery, Florida	(joint with Peter Houk)
2013–2014	Wayne Art Center, Pennsylvania (catalog)	(juried)
2013	Bank Street Arts, England (catalog)	(juried)

- 2013 Edwards Art Gallery, New Hampshire (joint with Shandra McLane)
- 2013 Sandusky Cultural Center, Ohio (invitational)
- 2013 Williams Center for the Arts, Pennsylvania (invitational)
- 2013 Charles B. Wang Center, New York (invitational)
- 2013 The Art Institute of Atlanta—Decatur, Georgia (juried)
- 2013–2015 *Art of the Book 2013 (traveling exhibit)* (catalog) (juried)
- Endeavor Art Gallery, Canada
- Harriet Irving Library, Canada
- Affinity Gallery, Canada
- Ontario Crafts Council Gallery, Canada
- Rare Books and Special Collections, Canada
- McPherson Library Gallery, Canada
- 2013 Kinokuniya Book Store, New York City (catalog) (invitational)
- 2013 Berkshire Museum, Massachusetts (catalog) (invitational)
- 2013 Guided By Invoices, New York City (invitational)
- 2013 Fuller Craft Museum, Massachusetts (juried)
- 2013 Firelands Association for the Visual Arts Gallery, Ohio (invitational)
- 2013 Dwight School, New York City (solo show)
- 2013 Mobilia Gallery, Massachusetts (invitational)
- 2013 The Art Museum, Kentucky (solo show)
- 2013 Vernon Community Arts Center, Connecticut (invitational)
- 2013–2014 *FAX + Pattern Exhibition (traveling exhibit)* (invitational)
- KARST, England
- Simons Center for Geometry and Physics Art Gallery, New York
- 2013–2014 Museum of Modern Art (MoMA), New York City (invitational)
- 2012 China Science & Technology Museum, China (catalog) (juried)
- 2012 Jong Ie Nara Paper Museum, Korea (juried)
- 2012–2013 Jaffe Center for Book Arts, Florida (invitational)
- 2012–2013 Renwick Gallery, DC (catalog) (invitational)
- 2012 Simons Center Art Gallery, New York (joint with Theo Jansen) (juried)
- 2012 College of Fine Arts Gallery, Maryland (catalog) (juried)
- 2012 Dorsky Gallery, New York (invitational)
- 2012 Eloise Pickard Smith Gallery, Santa Cruz (invitational)
- 2012 Central Library, Georgia (invitational)
- 2012–2016 *Folding Paper: The Infinite Possibilities of Origami (traveling exhibit)* (invitational)
- (catalog)
- Louisiana Art & Science Museum, Louisiana
- Bellevue Arts Museum, Washington
- Boise Art Museum, Idaho
- Center for the Arts of Bonita Springs, Florida
- Japanese American National Museum, California
- Peoria Riverfront Museum, Illinois
- Oregon Historical Society, Oregon
- Brigham Young University Museum of Art, Utah
- Crocker Art Museum, California
- Leigh Yawkey Woodson Art Museum, Wisconsin
- Thorne-Sagendorph Art Gallery, New Hampshire
- 2012 Fuller Craft Museum, Massachusetts (juried)
- 2012 Moreau Center for the Arts, Indiana (invitational)

2012	Guided By Invoices, New York City	(solo show)
2011	Sarah Silberman Art Gallery, Maryland	(invitational)
2011	Galerie Elena Lee, Canada	(invitational)
2011	Bridges 2011: Mathematics, Music, Art, Architecture, Culture, Portugal	(juried)
2011	Central Booking, New York	(invitational)
2009–2010	Peel Gallery, Texas	(invitational)
2009	Art C�ezar, Belgium	(invitational)
2008–2009	Museum of Modern Art (MoMA), New York City	(invitational)
2008	Museum of Modern Art (MoMA), New York City (catalog)	(invitational)
2007	Andrew and Laura McCain Gallery, Canada	(solo show)
2006	MIT Museum, Massachusetts	(invitational)
2006–2007	Canadian Museum of Civilization, Canada	(invitational)
2005	Massachusetts Institute of Technology, Massachusetts	(exhibit)
2004	<i>Building with Books: A Bibliophile’s Bedroom (traveling exhibit)</i> Boston Public Library, Massachusetts Massachusetts Institute of Technology, Massachusetts	(exhibit)

FILM SHOWINGS

Lino Tagliapietra: Glass Magician (joint work with Erik D. Demaine)

June–Oct. 2013 Fuller Craft Museum, “Reversible Reactions: Art Meets Science @ The MIT Glass Lab”, Brockton, MA

Apr.–May 2012 13th Annual Newport Beach Film Festival, Newport Beach, CA

Apr. 2012 6th Annual Buffalo Niagara Film Festival, Buffalo, NY

Feb. 2012 7th Annual Macon Film Festival, Macon, Atlanta

Dec. 2011 Creative Arts Film Festival

Nov. 2011 30th Three Rivers Film Festival, Competitive Shorts Program, Pittsburgh, PA

Nov. 2011 7th River’s Edge International Film Festival, Paducah, KY

May–Aug. 2011 Hallwylska museet, “Samtida konstglas fr an Murano — ur Fondazione di Venezias samlingar”, Stockholm, Sweden

Apr. 2011 MIT150: Under the Dome, Cambridge, MA

Apr. 2011 Mobilia Gallery Glass Quake Symposium, Boston, MA

Apr. 2011 The Entertainment Gathering, Monterey, CA

Mar. 2011 CraftBoston, Boston, MA

Feb.–May 2011 Istituto Veneto di Scienze, Lettere ed Arti, Palazzo Cavilli-Franchetti, “Lino Tagliapietra, da Murano allo Studio Glass, opere 1954–2011”, Venice, Italy

SELECTED HONORS

1. Guggenheim Fellow, John Simon Guggenheim Memorial Foundation, 2013
2. Artist-in-Residence, Pilchuck Glass School, 2012
3. Platinum Reel Award Winner (Nevada Film Festival, 2011) and Honorable Mention Award, Experimental Film Category (Los Angeles New Wave International Film Festival, 2011) for our 13-minute video “Lino Tagliapietra: Glass Magician” (2011)
4. Featured in 56-minute documentary *Between the Folds* about origami, 2008

STUDENTS

Past undergraduate students:

1. Kaitlyn Becker (Mechanical Engineering)
2. Aviv Ovadya (EECS)
3. Kathryn Shroyer (Mechanical Engineering)
4. Kat Wong (Mechanical Engineering)

Thesis committees:

1. Kyle Steinfeld (Master of Architecture), defended May 2004.
2. Ken Giesecke (Master of Architecture), defended Dec. 2003.

INVITED TALKS

- June 2013 Plenary talk, Glass Boston, Cambridge, Massachusetts.
- July 2012 Plenary talk, event for exhibit “(Un)folding Patterns”, Dorsky Gallery, Long Island City, New York.
- June 2012 Plenary talk, Pilchuck Glass School, Stanwood, Washington.
- Jan. 2010 Plenary talk, The Entertainment Gathering, Monterey, California.
- July 2008 “Art Meets Technology at MIT”, Women’s Technology Program, MIT
- Nov. 2007 “Mathematics Is Art”, Plenary talk, 17th Annual Fall Workshop on Computational Geometry, Hawthorne, New York.

RESEARCH COLLABORATORS

I have published papers with the following 173 co-authors: Timothy G. Abbott (MIT), Zachary Abel (MIT), Aaron B. Adcock (Stanford U.), Hee-Kap Ahn (Pohang U. Science & Technology), Oswin Aichholzer (TU Graz), Greg Aloupis (McGill U.), Byoung Kwon An (MIT), Esther Arkin (SUNY Stony Brook), Tetsuo Asano (JAIST), Daniel M. Aukes (Harvard U.), Sang Won Bae (Pohang U. Science & Technology), Devin Balkcom (Dartmouth), Brad Ballinger (U. California, Davis), Gill Barequet (Technion), Nadia M. Benbernou (MIT), Michael Bender (SUNY Stony Brook), Therese Biedl (U. Waterloo), Prosenjit Bose (Carleton U.), Kevin Buchin (Freie U. Berlin), Maike Buchin (Freie U. Berlin), Michael A. Burr (New York U.), Jonathan Buss (U. Waterloo), Sarah Cannon (Tufts U.), Jean Cardinal (U. Libre de Bruxelles), Eowyn Čenek (U. Waterloo), Timothy M. Chan (U. Waterloo), David Charlton (MIT), Barry Cipra (Minnesota), Sébastien Collette (U. Libre de Bruxelles), Robert Connelly (Cornell U.), Mirela Damian (Villanova U.), Eli Davis (MIT), Erik D. Demaine (MIT), Karim Douieb (Carleton U.), Vida Dujmović (McGill U.), Muriel Dulieu (Polytechnic Inst. NYU), Alan Edelman (MIT), Sarah Eisenstat (MIT), Dania El-Khechen (Concordia U.), David Eppstein (U. California, Irvine), Ruy Fabila-Monroy (U. Nacional Autónoma de México), Sándor Fekete (TU Braunschweig), Thomas Fevens (Concordia U.), Robin Flatland (Siena College), Rudolf Fleischer (Fudan U.), Eli Fox-Epstein (Brown U.), Greg Frederickson (Purdue U.), Erich Friedman (Stetson U.), MohammadTaghi Hajiaghayi (U. Maryland), Vi Hart (SUNY Stony Brook), Andrea Hawksley (MIT), Robert A. Hearn (MIT), Duc A. Hoang (JAIST), Michael Hoffmann (ETH Zurich), Takashi Horiyama (Saitama U.), David A. Huffman (U. California, Santa Cruz), John Hugg (Tufts U.), Thomas C. Hull (Western New England U.), Ferran Hurtado (U. Politècnica de Catalunya), John Iacono (Polytechnic Inst. NYU), Shinji Imahori (U. Tokyo), Mashhood Ishaque (Tufts U.), Hiro Ito (Kyoto University), Takehiro Ito (Tohoku U.), Jin-ichi Itoh (Kumamoto U.), Lars Jacobsen (U. Southern Denmark), Daniel Kane (U. California, San Diego), Craig Kaplan (U. Waterloo), Sangbae Kim (MIT), Masashi Kiyomi (JAIST), Christian Knauer (Freie U. Berlin), Scott D. Kominers (Harvard U.), Goran Konjevod (Arizona State U.), Matias Korman (U. Libre de Bruxelles), Duks Koschitz (MIT), Jason Ku (MIT), Anastasia Kurdia (U. Texas Dallas), Robert J. Lang (Lang Origami), Arthur Langerman (Langerman Diamonds), Stefan Langerman (U. Libre de Bruxelles), Sylvain Lazard (INRIA Lorraine), Charles E. Leiserson (MIT), Jeffrey Lindy (New York U.), Ching-Hao Liu (National Tsing-Hua University), Po-Ru Loh (MIT), Anna Lubiw (U. Waterloo), Jayson Lynch (MIT), Shelly Manber (MIT), Hiroaki Matsui (JAIST), Laura Meeker (MIT), Henk Meijer (Queens U.), Antonio Mesa (U. Habana), Yair N. Minsky (Yale U.), Joseph Mitchell (SUNY Stony Brook), Shuhei Miyashita (MIT), Thomas D. Morgan (Harvard U.), Pat Morin (McGill U.), J. Ian Munro (U. Waterloo), Chie Nara (Tokai U.), Jelani Nelson (MIT), Paul Nijjar (U. Waterloo), Michael P. O’Brien (NC State U.), Joseph O’Rourke (Smith College), John A. Ochsendorf (MIT), Timo von Oertzen (U. Saarlandes), Seung Man Oh (New York U.), Hirotaka Ono (Kyushu U.), Yota Otachi (JAIST), Aviv Ovadya (MIT), Mark Overmars (Utrecht U.), A. Laurie Palmer (Art Inst. Chicago), Belén Palop (U. Rey Juan Carlos), Irena Pashchenko (Stanford U.), Matthew J. Patitz (U. Texas — Pan American), Mihai Pătraşcu (AT&T Labs Research), Per-Olof Persson (MIT), Sheung-Hung Poon (National Tsing Hua U.), Gregory N. Price (MIT), Kayhan F. Qaiser (McGill U.), Eynat Rafalin (Google), Suneeta Ramaswami (Rutgers U.), Jennifer Ramseyer (MIT), Felix Reidl (NC State U.), Iris Reinbacher

(TU Braunschweig), Ares Ribó (Freie U. Berlin), Ronald L. Rivest (MIT), Steven Robbins (McGill U.), Tom Rodgers (Georgia), Benjamin Rossman (MIT), Günter Rote (Freie U. Berlin), Daniela Rus (MIT), Maria Saumell (U. Politècnica de Catalunya), Tao B. Schardl (MIT), André Schulz (Universität Münster), Robert T. Schweller (U. Texas — Pan American), Carlos Seara (U. Politècnica de Catalunya), Saurabh Sethia (SoftJin Tech.), Kathryn Seyboth (Tufts U.), Arlo Shallit (Waterloo, Canada), Jonah Shallit (Waterloo, Canada), Isaac Shapiro-Elowitz (Boston, Massachusetts), Steven Skiena (SUNY Stony Brook), Jack Snoeyink (U. North Carolina, Chapel Hill), Wanbin Son (Pohang U. Science & Technology), Michael Soss (McGill U.), Diane Souvaine (Tufts U.), Omari Stephens (MIT), Ileana Streinu (Smith College), Blair D. Sullivan (NC State U.), Scott M. Summers (U. Wisconsin, Platteville), Cynthia Sung (MIT), Tomohiro Tachi (U. Tokyo), Perouz Taslakian (U. Libre de Bruxelles), Michael T. Tolley (Harvard U.), Csaba D. Tóth (U. Calgary), Godfried Toussaint (New York U.), Ryuhei Uehara (JAIST), Takeaki Uno (National Inst. Informatics), Yushi Uno (Osaka Prefecture U.), Jorge Urrutia (U. Nacional Autónoma de México), Helena Verrill (Louisiana State U.), Jérôme Vervier (U. Libre de Bruxelles), Giovanni Viglietta (U. Pisa), Fernando Sánchez Villaamil (RWTH Aachen U.), Tomáš Vinař (U. Waterloo), Ming-wei Wang (U. Waterloo), Sue Whitesides (McGill U.), Andrew Winslow (Tufts U.), Robert Wood (Harvard U.), Damien Woods (Caltech), Takeshi Yamada (JAIST), Vincent Yeung (MIT), Zhong You (Oxford U.).

BOOKS

1. *A Lifetime of Puzzles* (edited with Erik Demaine and Tom Rodgers), A K Peters, Oct. 2008.
2. *Tribute to a Mathemagician* (edited with Barry Cipra, Erik D. Demaine, and Tom Rodgers), A K Peters, Nov. 2004.

REFEREED JOURNAL ARTICLES

Most papers are available from <http://martindemaine.org/papers/>.

3. “Linear-time algorithm for sliding tokens on trees” (joint work with Erik D. Demaine, Eli Fox-Epstein, Duc A. Hoang, Takehiro Ito, Hirotaka Ono, Yota Otachi, Ryuhei Uehara, and Takeshi Yamada), *Theoretical Computer Science*, volume 600, pages 132–142, 2015.
4. “A review on curved creases in art, design and mathematics” (joint work with Erik Demaine, Duks Koschitz, and Tomohiro Tachi), *Symmetry: Culture and Science*, volume 26, number 2, pages 145–161, 2015.
5. “Fun with Fonts: Algorithmic Typography” (joint work with Erik D. Demaine), *Theoretical Computer Science*, volume 586, pages 111–119, June 2015.
6. “Zig-Zag Numberlink is NP-Complete” (joint work with Aaron B. Adcock, Erik D. Demaine, Michael P. O’Brien, Felix Reidl, Fernando Sanchez Villaamil, and Blair D. Sullivan), *Journal of Information Processing*, volume 23, number 3, pages 239–245, 2015.
7. “Computational Complexity of Piano-Hinged Dissections” (joint work with Zachary Abel, Erik D. Demaine, Takashi Horiyama, and Ryuhei Uehara), *IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences*, volume E97-A, number 6, pages 1206–1212, 2014.
8. “Picture-Hanging Puzzles” (joint work with Erik D. Demaine, Yair N. Minsky, Joseph S. B. Mitchell, Ronald L. Rivest, and Mihai Pătraşcu), *Theory of Computing Systems*, volume 54, number 4, pages 531–550, May 2014.
9. “UNO is hard, even for a single player” (joint work with Erik D. Demaine, Ryuhei Uehara, Takeaki Uno, and Yushi Uno), *Theoretical Computer Science*, volume 521, pages 51–61, Feb. 2014.
10. “Folding Equilateral Plane Graphs” (joint work with Zachary Abel, Erik D. Demaine, Sarah Eisenstat, Jayson Lynch, Tao B. Schardl, and Isaac Shapiro-Elowitz), *International Journal of Computational Geometry and Applications*, volume 23, number 2, pages 75–92, Apr. 2013.
11. “Refold Rigidity of Convex Polyhedra” (joint work with Erik D. Demaine, Jin-ichi Itoh, Anna Lubiw, Chie Nara, and Joseph O’Rourke), *Computational Geometry: Theory and Applications*, volume 46, number 8, pages 979–989, Oct. 2013.
12. “Finding a Hamiltonian Path in a Cube with Specified Turns is Hard” (joint work with Zachary Abel, Erik D. Demaine, Sarah Eisenstat, Jayson Lynch, and Tao B. Schardl), *Journal of Information Processing*, volume 21, number 3, pages 368–377, July 2013. Specially Selected Paper.

13. “Reconstructing David Huffman’s Origami Tessellations” (joint work with Eli Davis, Erik D. Demaine, and Jennifer Ramseyer), *Journal of Mechanical Design*, volume 135, number 11, pages 111010-1–111010-7, Nov. 2013.
14. “Joining Unfoldings of 3-D Surfaces” (joint work with Cynthia Sung, Erik D. Demaine, and Daniela Rus), *Journal of Mechanical Design*, volume 135, number 11, pages 111001-1–111001-9, Nov. 2013.
15. “Bounded-Degree Polyhedronization of Point Sets” (joint work with Gill Barequet, Nadia Benbernou, David Charlton, Erik D. Demaine, Mashhood Ishaque, Anna Lubiw, André Schulz, Diane L. Souvaine, Godfried T. Toussaint, and Andrew Winslow), *Computational Geometry: Theory and Applications*, volume 46, number 2, pages 917–928, Feb. 2013.
16. “Non-crossing matchings of points with geometric objects” (joint work with Greg Aloupis, Jean Cardinal, Sébastien Collette, Erik D. Demaine, Muriel Dulieu, Ruy Fabila-Monroy, Vi Hart, Ferran Hurtado, Stefan Langerman, Maria Saumell, Carlos Seara, and Perouz Taslakian), *Computational Geometry: Theory and Applications*, volume 46, number 1, pages 78–92, Jan. 2013.
17. “Hinged Dissections Exist” (joint work with Timothy G. Abbott, Zachary Abel, David Charlton, Erik D. Demaine, and Scott Duke Kominers), *Discrete & Computational Geometry*, volume 47, number 1, pages 150–186, 2012.
18. “NP-completeness of generalized Kaboozle” (joint work with Tetsuo Asano, Erik D. Demaine, and Ryuhei Uehara), *Journal of Information Processing*, volume 20, number 3, pages 713–718, July 2012.
19. “Ghost Chimneys” (joint work with David Charlton, Erik D. Demaine, Vida Dujmović, Pat Morin, and Ryuhei Uehara), *International Journal of Computational Geometry and Applications*, volume 22, number 3, pages 207–214, June 2012.
20. “Any Monotone Boolean Function Can Be Realized by Interlocked Polygons” (joint work with Erik D. Demaine and Ryuhei Uehara), *Algorithms*, volume 5, number 1, pages 148–157, Mar. 2012.
21. “Covering points by disjoint boxes with outliers” (joint work with Hee-Kap Ahn, Sang Won Bae, Erik D. Demaine, Sang-Sub Kim, Matias Korman, Iris Reinbacher, and Wanbin Son), *Computational Geometry: Theory and Applications*, volume 44, number 3, pages 178–190, 2011.
22. “Algorithmic Folding Complexity” (joint work with Jean Cardinal, Erik D. Demaine, Shinji Imahori, Tsuyoshi Ito, Masashi Kiyomi, Stefan Langerman, Ryuhei Uehara, and Takeaki Uno), *Graphs and Combinatorics*, volume 27, number 3, pages 341–351, 2011.
23. “Continuous Blooming of Convex Polyhedra” (joint work with Erik D. Demaine, Vi Hart, John Iacono, Stefan Langerman, and Joseph O’Rourke), *Graphs and Combinatorics*, volume 27, number 3, pages 363–376, 2011.
24. “(Non)existence of Pleated Folds: How Paper Folds Between Creases” (joint work with Erik D. Demaine, Vi Hart, Gregory N. Price, and Tomohiro Tachi), *Graphs and Combinatorics*, volume 27, number 3, pages 377–397, 2011.
25. “Locked and Unlocked Chains of Planar Shapes” (joint work with Robert Connelly, Erik D. Demaine, Sándor Fekete, Stefan Langerman, Joseph S. B. Mitchell, Ares Ribó, and Günter Rote), *Discrete & Computational Geometry*, volume 44, number 2, pages 439–462, 2010.
26. “Wrapping Spheres with Flat Paper” (joint work with Erik D. Demaine, John Iacono, and Stefan Langerman), *Computational Geometry: Theory and Applications*, volume 42, number 8, pages 748–757, 2009. Special issue of selected papers from the 20th European Workshop on Computational Geometry, 2007.
27. “Dynamic Ham-Sandwich Cuts in the Plane” (joint work with Timothy G. Abbott, Michael A. Burr, Timothy M. Chan, Erik D. Demaine, John Hugg, Daniel Kane, Stefan Langerman, Jelani Nelson, Eynat Rafalin, Kathryn Seyboth, and Vincent Yeung), *Computational Geometry: Theory and Applications*, volume 42, number 5, pages 419–428, July 2009. Special issue of selected papers from CCCG 2005.
28. “Staged Self-Assembly: Nanomanufacture of Arbitrary Shapes with $O(1)$ Glues” (joint work with Erik D. Demaine, Sándor P. Fekete, Mashhood Ishaque, Eynat Rafalin, Robert T. Schweller, and Diane L. Souvaine), *Natural Computing*, volume 7, number 3, pages 347–370, Sept. 2008. Special issue of selected papers from DNA 2007.
29. “Sand Drawings and Gaussian Graphs” (joint work with Erik D. Demaine, Perouz Taslakian, and Godfried T. Toussaint), *Journal of Mathematics and the Arts*, volume 1, number 2, pages 125–132, June 2007.

30. “Jigsaw Puzzles, Edge Matching, and Polyomino Packing: Connections and Complexity” (joint work with Erik D. Demaine), *Graphs and Combinatorics*, volume 23 (Supplement), pages 195–208, June 2007. Special issue on Computational Geometry and Graph Theory: The Akiyama-Chvatal Festschrift.
31. “Puzzles, Art, and Magic with Algorithms” (joint work with Erik D. Demaine), *Theory of Computing Systems*, volume 39, number 3, pages 473–481, June 2006. Special issue of selected papers from FUN 2004.
32. “Morpion Solitaire” (joint work with Erik D. Demaine, Arthur Langerman, and Stefan Langerman), *Theory of Computing Systems*, volume 39, number 3, pages 439–453, June 2006. Special issue of selected papers from FUN 2004. Translated into Portuguese: “Cinco-em-linha solitário”, *Boletim da Sociedade Portuguesa de Matemática* 54:125–142, May 2006.
33. “The Helium Stockpile: A Collaboration in Mathematical Folding Sculpture” (joint work with Erik D. Demaine and A. Laurie Palmer), *Leonardo*, volume 39, number 3, pages 233–235, June 2006.
34. “Hinged Dissection of Polyominoes and Polyforms” (joint work with Erik D. Demaine, David Eppstein, Greg N. Frederickson, and Erich Friedman), *Computational Geometry: Theory and Applications*, volume 31, number 3, pages 237–262, June 2005. Special issue of selected papers from CCCG’99.
35. “When Can You Fold a Map?” (joint work with Esther M. Arkin, Michael A. Bender, Erik D. Demaine, Joseph S. B. Mitchell, Saurabh Sethia, and Steven S. Skiena), *Computational Geometry: Theory and Applications*, volume 29, number 1, pages 23–46, Sept. 2004. Special issue of selected papers from the 10th Annual Fall Workshop on Computational Geometry, 2000.
36. “Solitaire Clobber” (joint work with Erik D. Demaine and Rudolf Fleischer), *Theoretical Computer Science*, volume 313, number 3, pages 325–338, Feb. 2004. Special issue of selected papers presented at the Schloss Dagstuhl Seminar on Algorithmic Combinatorial Game Theory, 2002.
37. “Pushing Blocks is Hard” (joint work with Erik D. Demaine, Michael Hoffmann, and Joseph O’Rourke), *Computational Geometry: Theory and Applications*, volume 26, number 1, pages 21–36, Aug. 2003. Special issue of selected papers from the 13th Canadian Conference on Computational Geometry, 2001.
38. “Palindrome Recognition Using a Multidimensional Tape” (joint work with Therese C. Biedl, Jonathan F. Buss, Erik D. Demaine, Mohammadtaghi Hajiaghayi, and Tomáš Vinař), *Theoretical Computer Science*, volume 302, number 1–3, pages 475–480, June 2003.
39. “Hinged Dissection of the Alphabet” (joint work with Erik D. Demaine), *Journal of Recreational Mathematics*, volume 31, number 3, pages 204–207, 2003.
40. “Enumerating Foldings and Unfoldings between Polygons and Polytopes” (joint work with Erik D. Demaine, Anna Lubiw, and Joseph O’Rourke), *Graphs and Combinatorics*, volume 18, number 1, pages 93–104, 2002.
41. “Balanced k -Colorings” (joint work with Therese C. Biedl, Eowyn Čenek, Timothy M. Chan, Erik D. Demaine, Rudolf Fleischer, and Ming-Wei Wang), *Discrete Mathematics*, volume 254, pages 19–32, 2002.
42. “A Note on Reconfiguring Tree Linkages: Trees can Lock” (joint work with Therese Biedl, Erik Demaine, Sylvain Lazard, Anna Lubiw, Joseph O’Rourke, Steve Robbins, Ileana Streinu, Godfried Toussaint, and Sue Whitesides), *Discrete Applied Mathematics*, volume 117, number 1–3, pages 293–297, 2002.
43. “Locked and Unlocked Polygonal Chains in Three Dimensions” (joint work with T. Biedl, E. Demaine, S. Lazard, A. Lubiw, J. O’Rourke, M. Overmars, S. Robbins, I. Streinu, G. Toussaint, and S. Whitesides), *Discrete & Computational Geometry*, volume 26, number 3, pages 269–281, Oct. 2001.
44. “Polygons Cuttable by a Circular Saw” (joint work with Erik D. Demaine and Craig S. Kaplan), *Computational Geometry: Theory and Applications*, volume 20, number 1–2, pages 69–84, Oct. 2001. Special issue of selected papers from CCCG 2000.
45. “Folding Flat Silhouettes and Wrapping Polyhedral Packages: New Results in Computational Origami” (joint work with Erik D. Demaine and Joseph S. B. Mitchell), *Computational Geometry: Theory and Applications*, volume 16, number 1, pages 3–21, 2000. Special issue of selected papers from CGC’98.

REFEREED BOOK CHAPTERS

46. “Narrow Misère Dots-and-Boxes” (joint work with Sébastien Collette, Erik D. Demaine, and Stefan Langerman), in *Games of No Chance 4*, to appear.

47. “Rigid Flattening of Polyhedra with Slits” (joint work with Zachary Abel, Robert Connelly, Erik D. Demaine, Thomas Hull, Anna Lubiw, and Tomohiro Tachi), in *Origami⁶: Proceedings of the 6th International Meeting on Origami in Science, Mathematics and Education*, to appear, Tokyo, Japan, Aug. 2014.
48. “Scaling a Surface down to Any Fraction by Twist Folding” (joint work with Erik D. Demaine and Kayhan F. Qaiser), in *Origami⁶: Proceedings of the 6th International Meeting on Origami in Science, Mathematics and Education*, to appear, Tokyo, Japan, Aug. 2014.
49. “Characterization of Curved Creases and Rulings: Design and Analysis of Lens Tessellations” (joint work with Erik D. Demaine, David A. Huffman, Duks Koschitz, and Tomohiro Tachi), in *Origami⁶: Proceedings of the 6th International Meeting on Origami in Science, Mathematics and Education*, to appear, Tokyo, Japan, Aug. 2014.
50. “Balloon Polyhedra” (joint work with Erik D. Demaine and Vi Hart), in *Shaping Space: A Polyhedral Approach*, M. Senechal, ed., Second Edition, pages 33–40, 2013.
51. “Variations on Instant Insanity” (joint work with Erik D. Demaine, Sarah Eisenstat, Thomas D. Morgan, and Ryuhei Uehara), in *Space-Efficient Data Structures, Streams, and Algorithms: Papers in Honor of J. Ian Munro on the Occasion of His 66th Birthday*, A. Brodnik, A. López-Ortiz, V. Raman, and A. Viola, eds., Lecture Notes in Computer Science 8066, pages 33–47, Aug. 2013.
52. “Reconstructing David Huffman’s Legacy in Curved-Crease Folding” (joint work with Erik D. Demaine and Duks Koschitz), in *Origami⁵: Proceedings of the 5th International Conference on Origami in Science, Mathematics and Education*, pages 39–52, Singapore, July 2010, A K Peters.
53. “Folding Any Orthogonal Maze” (joint work with Erik D. Demaine and Jason Ku), in *Origami⁵: Proceedings of the 5th International Conference on Origami in Science, Mathematics and Education*, pages 449–454, Singapore, July 2010, A K Peters.
54. “Universal Hinge Patterns to Fold Orthogonal Shapes” (joint work with Nadia M. Benbernou, Erik D. Demaine, and Aviv Ovadya), in *Origami⁵: Proceedings of the 5th International Conference on Origami in Science, Mathematics and Education*, pages 405–420, Singapore, July 2010, A K Peters.
55. “The Complexity of Dyson Telescopes” (joint work with Erik D. Demaine, Rudolf Fleischer, Robert A. Hearn, and Timo von Oertzen), in *Games of No Chance 3*, M. H. Albert and R. J. Nowakowski, eds., Mathematical Sciences Research Institute Publications 56, pages 271–285, 2009, Cambridge University Press.
56. “Coin-Flipping Magic” (joint work with Nadia Benbernou, Erik D. Demaine, and Benjamin Rossman), in *Exchange Book of the 8th Gathering for Gardner*, Atlanta, GA, Mar. 2008.
57. “Folding Paper Shopping Bags” (joint work with Devin J. Balkcom, Erik D. Demaine, John A. Ochsendorf, and Zhong You), in *Origami⁴: Proceedings of the 4th International Meeting of Origami Science, Math, and Education*, pages 315–334, Pasadena, CA, Sept. 2006, A K Peters.
58. “Sliding-Coin Puzzles” (joint work with Erik D. Demaine), in *Tribute to a Mathemagician*, pages 63–72, 2004, A K Peters.
59. “Fold-and-Cut Magic” (joint work with Erik D. Demaine), in *Tribute to a Mathemagician*, pages 23–30, 2004, A K Peters.
60. “The Complexity of Clickomania” (joint work with Therese C. Biedl, Erik D. Demaine, Rudolf Fleischer, Lars Jacobsen, and J. Ian Munro), in *More Games of No Chance*, R. J. Nowakowski, ed., pages 389–404, 2002, Cambridge University Press. Collection of papers from the MSRI Combinatorial Game Theory Research Workshop, Berkeley, California, July 24–28, 2000.
61. “Phutball Endgames are Hard” (joint work with Erik D. Demaine and David Eppstein), in *More Games of No Chance*, R. J. Nowakowski, ed., pages 351–360, 2002, Cambridge University Press. Collection of papers from the MSRI Combinatorial Game Theory Research Workshop, Berkeley, California, July 24–28, 2000.
62. “Coin-Moving Puzzles” (joint work with Erik D. Demaine and Helena A. Verrill), in *More Games of No Chance*, R. J. Nowakowski, ed., pages 405–431, 2002, Cambridge University Press. Collection of papers from the MSRI Combinatorial Game Theory Research Workshop, Berkeley, California, July 24–28, 2000.

REFEREED CONFERENCE PUBLICATIONS

Conference papers that have been accepted as journal articles or book chapters are only listed above (so each paper is listed once).

63. “A Dissimilarity Measure for Comparing Origami Crease Patterns” (joint work with Seung Man Oh, Godfried T. Toussaint, and Erik D. Demaine), in *Proceedings of the 4th International Conference on Pattern Recognition Applications and Methods*, volume 1, pages 386–393, Lisbon, Portugal, Jan. 2015.
64. “Flat Foldings of Plane Graphs with Prescribed Angles and Edge Lengths” (joint work with Zachary Abel, Erik D. Demaine, David Eppstein, Anna Lubiw, and Ryuhei Uehara), in *Proceedings of the 22nd International Symposium on Graph Drawing*, pages 272–283, Würzburg, Germany, Sept. 2014.
65. “One Tile to Rule Them All: Simulating Any Tile Assembly System with a Single Universal Tile” (joint work with Erik D. Demaine, Sándor P. Fekete, Matthew J. Patitz, Robert T. Schweller, Andrew Winslow, and Damien Woods), in *Proceedings of the 41st International Colloquium on Automata, Languages and Programming*, J. Esparza, P. Fraigniaud, T. Husfeldt, and E. Koutsoupias, eds., Lecture Notes in Computer Science 8572, pages 368–379, 2014.
66. “Continuously Flattening Polyhedra Using Straight Skeletons” (joint work with Zachary Abel, Erik D. Demaine, Jin-Ichi Itoh, Anna Lubiw, Chie Nara, and Joseph O’Rourke), in *Proceedings of the 30th Annual Symposium on Computational Geometry*, to appear, Kyoto, Japan, June 2014.
67. “An End-To-End Approach to Making Self-Folded 3D Surface Shapes by Uniform Heating” (joint work with Byoungkwon An, Shuhei Miyashita, Michael T. Tolley, Daniel M. Aukes, Laura Meeker, Erik D. Demaine, Robert J. Wood, and Daniela Rus), in *Proceedings of the 2014 IEEE International Conference on Robotics and Automation*, pages 1466–1473, Hong Kong, China, May–June 2014.
68. “Algorithms for Designing Pop-Up Cards” (joint work with Zachary Abel, Erik D. Demaine, Sarah Eisenstat, Anna Lubiw, André Schulz, Diane Souvaine, Giovanni Viglietta, and Andrew Winslow), in *Proceedings of the 30th International Symposium on Theoretical Aspects of Computer Science*, pages 269–280, Kiel, Germany, Feb.–Mar. 2013.
69. “Two Hands Are Better Than One (up to constant factors): Self-Assembly In The 2HAM vs. aTAM” (joint work with Sarah Cannon, Erik D. Demaine, Sarah Eisenstat, Matthew J. Patitz, Robert Schweller, Scott M. Summers, and Andrew Winslow), in *Proceedings of the 30th International Symposium on Theoretical Aspects of Computer Science*, pages 172–184, Kiel, Germany, Feb.–Mar. 2013.
70. “Algorithms for Solving Rubik’s Cubes” (joint work with Erik D. Demaine, Sarah Eisenstat, Anna Lubiw, and Andrew Winslow), in *Proceedings of the 19th Annual European Symposium on Algorithms*, pages 689–700, Sept. 2011.
71. “Meshes preserving minimum feature size” (joint work with Greg Aloupis, Erik D. Demaine, Vida Dujmović, and John Iacono), in *Revised Papers from the 14th Spanish Meeting on Computational Geometry*, A. Márquez, P. Ramos, and J. Urrutia, eds., Lecture Notes in Computer Science 7579, pages 258–273, Alcalá de Henares, Spain, June 2011.
72. “Making Polygons by Simple Folds and One Straight Cut” (joint work with Erik D. Demaine, Andrea Hawksley, Hiro Ito, Po-Ru Loh, Shelly Manber, and Omari Stephens), in *Revised Papers from the China-Japan Joint Conference on Computational Geometry, Graphs and Applications*, Lecture Notes in Computer Science, pages 27–43, Dalian, China, Nov. 2010.
73. “Common Unfoldings of Polyominoes and Polycube” (joint work with Greg Aloupis, Prosenjit K. Bose, Sebastien Collette, Erik D. Demaine, Karim Douieb, Vida Dujmović, John Iacono, Stefan Langerman, and Pat Morin), in *Revised Papers from the China-Japan Joint Conference on Computational Geometry, Graphs and Applications*, Lecture Notes in Computer Science 7033, pages 44–54, Dalian, China, Nov. 2010.
74. “Shape Replication Through Self-Assembly and RNase Enzymes” (joint work with Zachary Abel, Nadia Benbernou, Mirela Damian, Erik D. Demaine, Robin Flatland, Scott Kominers, and Robert Schweller), in *Proceedings of the 21st Annual ACM-SIAM Symposium on Discrete Algorithms*, pages 1045–1064, Austin, TX, Jan. 2010.
75. “Folding a Better Checkerboard” (joint work with Erik D. Demaine, Goran Konjevod, and Robert J. Lang), in *Proceedings of the 20th Annual International Symposium on Algorithms and Computation*, Lecture Notes in Computer Science 5878, pages 1074–1083, Hawaii, USA, Dec. 2009.
76. “Minimal Locked Trees” (joint work with Brad Ballinger, David Charlton, Erik D. Demaine, John Iacono, Ching-Hao Liu, and Sheung-Hung Poon), in *Proceedings of the 11th Algorithms and Data*

- Structures Symposium*, Lecture Notes in Computer Science 5664, pages 61–73, Banff, Canada, Aug. 2009.
77. “Deflating The Pentagon” (joint work with Erik D. Demaine, Thomas Fevens, Antonio Mesa, Michael Soss, Diane L. Souvaine, Perouz Taslakian, and Godfried Toussaint), in *Revised Papers from the Kyoto International Conference on Computational Geometry and Graph Theory*, Lecture Notes in Computer Science 4535, pages 56–67, Kyoto, Japan, June 2007.
 78. “Hinged Dissection of Polypolyhedra” (joint work with Erik D. Demaine, Jeffrey F. Lindy, and Diane L. Souvaine), in *Proceedings of the 9th Workshop on Algorithms and Data Structures*, Lecture Notes in Computer Science 3608, pages 205–217, Waterloo, Canada, Aug. 2005.
 79. “Recent Results in Computational Origami” (joint work with Erik D. Demaine), in *Origami³: Proceedings of the 3rd International Meeting of Origami Science, Math, and Education*, pages 3–16, Monterey, CA, Mar. 2001, A K Peters. Translated into Japanese in a book of selected papers from OSME 2001, Morikita Publishing Co., 2005, 3–16.
 80. “Polyhedral Sculptures with Hyperbolic Paraboloids” (joint work with Erik D. Demaine and Anna Lubiw), in *Proceedings of the 2nd Annual Conference of BRIDGES: Mathematical Connections in Art, Music, and Science*, pages 91–100, Winfield, KS, July–Aug. 1999.
 81. “Folding and One Straight Cut Suffice” (joint work with Erik D. Demaine and Anna Lubiw), in *Proceedings of the 10th Annual ACM-SIAM Symposium on Discrete Algorithms*, pages 891–892, Baltimore, MD, Jan. 1999.
 82. “Folding and Cutting Paper” (joint work with Erik D. Demaine and Anna Lubiw), in *Revised Papers from the Japan Conference on Discrete and Computational Geometry*, Lecture Notes in Computer Science 1763, pages 104–117, Tokyo, Japan, Dec. 1998.
 83. “Planar Drawings of Origami Polyhedra” (joint work with Erik D. Demaine), in *Proceedings of the 6th Symposium on Graph Drawing*, Lecture Notes in Computer Science 1547, pages 438–440, Montréal, Canada, Aug. 1998.

OTHER PUBLICATIONS

84. “ k -piece dissection is NP-hard” (joint work with Jeffrey Bosboom, Erik D. Demaine, Jayson Lynch, Pasin Manurangsi, Mikhail Rudoy, and Anak Yodpinyanee), in *Abstracts from the 18th Japan Conference on Discrete and Computational Geometry and Graphs*, to appear, Kyoto, Japan, Sept. 2015.
85. “Continuous flattening of orthogonal polyhedra” (joint work with Erik D. Demaine, Jin-Ichi Itoh, and Chie Nara), in *Abstracts from the 18th Japan Conference on Discrete and Computational Geometry and Graphs*, to appear, Kyoto, Japan, Sept. 2015.
86. “Linkage Puzzle Font” (joint work with Erik D. Demaine), in *Exchange Book of the 11th Gathering for Gardner*, to appear, Atlanta, GA, Mar. 2014.
87. “Zipper Unfolding of Domes and Prismoids” (joint work with Erik D. Demaine and Ryuhei Uehara), in *Proceedings of the 25th Canadian Conference on Computational Geometry*, to appear, Waterloo, Canada, Aug. 2013.
88. “Edge-guarding Orthogonal Polyhedra” (joint work with Nadia M. Benbernou, Erik D. Demaine, Anastasia Kurdia, Joseph O’Rourke, Godfried Toussaint, Jorge Urrutia, and Giovanni Viglietta), in *Proceedings of the 23rd Canadian Conference on Computational Geometry*, to appear, Toronto, Canada, Aug. 2011.
89. “Convexifying Polygons Without Losing Visibilities” (joint work with Oswin Aichholzer, Greg Aloupis, Erik D. Demaine, Vida Dujmović, Ferran Hurtado, Anna Lubiw, Günter Rote, André Schulz, Diane L. Souvaine, and Andrew Winslow), in *Proceedings of the 23rd Canadian Conference on Computational Geometry*, to appear, Toronto, Canada, Aug. 2011.
90. “Common Developments of Several Different Orthogonal Boxes” (joint work with Zachary Abel, Erik Demaine, Hiroaki Matsui, Günter Rote, and Ryuhei Uehara), in *Proceedings of the 23rd Canadian Conference on Computational Geometry*, to appear, Toronto, Canada, Aug. 2011.
91. “A Topologically Convex Vertex-Ununfoldable Polyhedron” (joint work with Zachary Abel and Erik D. Demaine), in *Proceedings of the 23rd Canadian Conference on Computational Geometry*, to appear, Toronto, Canada, Aug. 2011.
92. “Zipper Unfoldings of Polyhedral Complexes” (joint work with Erik D. Demaine, Anna Lubiw, Arlo Shallit, and Jonah L. Shallit), in *Proceedings of the 22nd Canadian Conference on Computational*

- Geometry*, pages 219–222, Winnipeg, Canada, Aug. 2010.
93. “Conveyer-Belt Alphabet” (joint work with Erik D. Demaine and Belén Palop), in *Findings in Elasticity*, H. Aardse and A. van Baalen, eds., pages 86–89, Apr. 2010, Pars Foundation, Lars Müller Publishers.
 94. “Conveyer Belt Puzzle Font” (joint work with Erik D. Demaine and Belén Palop), in *Exchange Book of the 9th Gathering for Gardner*, to appear, Atlanta, GA, Mar. 2010.
 95. “Origami Maze Puzzle Font” (joint work with Erik D. Demaine and Jason Ku), in *Exchange Book of the 9th Gathering for Gardner*, to appear, Atlanta, GA, Mar. 2010.
 96. “Mathematics Is Art” (joint work with Erik D. Demaine), in *Proceedings of 12th Annual Conference of BRIDGES: Mathematics, Music, Art, Architecture, Culture*, pages 1–10, Banff, Canada, July 2009.
 97. “Locked Thick Chains” (joint work with Erik D. Demaine, Stefan Langerman, and Jérôme Vervier), in *Abstracts from the 25th European Workshop on Computational Geometry*, pages 65–68, Brussels, Belgium, Mar. 2009.
 98. “Curved Crease Origami” (joint work with Duks Koschitz and Erik D. Demaine), in *Abstracts from Advances in Architectural Geometry*, pages 29–32, Vienna, Austria, Sept. 2008.
 99. “Computational Balloon Twisting: The Theory of Balloon Polyhedra” (joint work with Erik D. Demaine and Vi Hart), in *Proceedings of the 20th Canadian Conference on Computational Geometry*, Montréal, Canada, Aug. 2008. Invited to special issue of *Computational Geometry: Theory and Applications*.
 100. “Vertex Pops and Popturns” (joint work with Greg Aloupis, Brad Ballinger, Prosenjit Bose, Mirela Damian, Erik D. Demaine, Robin Flatland, Ferran Hurtado, Stefan Langerman, Joseph O’Rourke, Perouz Taslakian, and Godfried Toussaint), in *Proceedings of the 19th Canadian Conference on Computational Geometry*, pages 137–140, Ottawa, Canada, Aug. 2007.
 101. “On Rolling Cube Puzzles” (joint work with Kevin Buchin, Maike Buchin, Erik D. Demaine, Dania El-Khechen, Sándor Fekete, Christian Knauer, André Schulz, and Perouz Taslakian), in *Proceedings of the 19th Canadian Conference on Computational Geometry*, Ottawa, Canada, Aug. 2007.
 102. “Disjoint Segments have Convex Partitions with 2-Edge Connected Dual Graphs” (joint work with Nadia M. Benbernou, Erik D. Demaine, Michael Hoffmann, Mashhood Ishaque, Diane L. Souvaine, and Csaba D. Tóth), in *Proceedings of the 19th Canadian Conference on Computational Geometry*, pages 13–16, Ottawa, Canada, Aug. 2007.
 103. “Wrapping the Mozartkugel” (joint work with Erik D. Demaine, John Iacono, and Stefan Langerman), in *Abstracts from the 24th European Workshop on Computational Geometry*, pages 14–17, Graz, Austria, Mar. 2007. Invited to special issue of *Computational Geometry: Theory and Applications*.
 104. “Deflating The Pentagon” (joint work with Erik D. Demaine, Diane L. Souvaine, and Perouz Taslakian), in *Abstracts from the 24th European Workshop on Computational Geometry*, pages 10–13, Graz, Austria, Mar. 2007.
 105. “Curves in the Sand: Algorithmic Drawing” (joint work with Mirela Damian, Erik D. Demaine, Vida Dujmović, Dania El-Khechen, Robin Flatland, John Iacono, Stefan Langerman, Henk Meijer, Suneeta Ramaswami, Diane L. Souvaine, Perouz Taslakian, and Godfried T. Toussaint), in *Proceedings of the 18th Canadian Conference on Computational Geometry*, pages 11–14, Aug. 2006.
 106. “Building Blocks and Excluded Sums” (joint work with Erik D. Demaine, Alan Edelman, Charles E. Leiserson, and Per-Olof Persson), *SIAM News*, volume 38, number 1, pages 1, 4, 6, Jan. 2005.
 107. “Puzzles, Art, and Magic with Algorithms” (joint work with Erik D. Demaine), in *Proceedings of the 15th Annual International Symposium on Algorithms and Computation*, Lecture Notes in Computer Science 3341, pages 1, Hong Kong, China, 2004.
 108. “Tighter Bounds on the Genus of Nonorthogonal Polyhedra Built from Rectangles” (joint work with Therese Biedl, Timothy M. Chan, Erik D. Demaine, Paul Nijjar, Ryuhei Uehara, and Ming-wei Wang), in *Proceedings of the 14th Canadian Conference on Computational Geometry*, pages 105–108, Lethbridge, Canada, Aug. 2002.
 109. “The CCCG 2001 Logo” (joint work with Erik D. Demaine and Anna Lubiw), in *Proceedings of the 13th Canadian Conference on Computational Geometry*, pages iv–v, Waterloo, Canada, Aug. 2001.
 110. “PushPush and Push-1 are NP-hard in 2D” (joint work with Erik D. Demaine and Joseph O’Rourke), in *Proceedings of the 12th Annual Canadian Conference on Computational Geometry*, pages 211–219,

Fredericton, Canada, Aug. 2000.

111. “Metamorphosis of the Cube” (joint work with Erik Demaine, Anna Lubiw, Joseph O’Rourke, and Irena Pashchenko), in *8th Annual Video Review of Computational Geometry, Proceedings of the 15th Annual ACM Symposium on Computational Geometry*, pages 409–410, Miami Beach, FL, June 1999.
112. “Hiding Disks in Folded Polygons” (joint work with Therese C. Biedl, Erik D. Demaine, Anna Lubiw, and Godfried T. Toussaint), in *Proceedings of the 10th Canadian Conference on Computational Geometry*, Montréal, Canada, Aug. 1998.
113. “Unfolding Some Classes of Orthogonal Polyhedra” (joint work with Therese Biedl, Erik Demaine, Anna Lubiw, Mark Overmars, Joseph O’Rourke, Steve Robbins, and Sue Whitesides), in *Proceedings of the 10th Canadian Conference on Computational Geometry*, Montréal, Canada, Aug. 1998.

AWARDS

Rare Craft Fellowship Award, American Craft Council, 2016

Guggenheim Fellow, John Simon Guggenheim Memorial Foundation, 2013