

Department of the Arts
Rensselaer Polytechnic Institute
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Ben Chang

Media artist, game designer, virtual reality researcher, educator

Current Position

2010-current Associate Professor, Department of the Arts
Program Director, Games and Simulation Arts and Sciences
Rensselaer Polytechnic Institute

Professional Experience

The School of the Art Institute of Chicago

2009-2010 Chair, Department of Art and Technology Studies
2007-2010 Associate Professor
2001-2007 Assistant Professor
2000-2001 Instructor

2000-2001 Lead Interactive Developer, BoomCubed Design, Chicago

1998-1999 Instructor, Columbia College Chicago

1998-2000 Instructor, Mac University, Chicago

Education

2000 MFA The School of the Art Institute of Chicago, Art and Technology
1998 BA Amherst College, Computer Science, *cum laude*

Exhibitions and Performances

- 2017 *Curating Mixed Realities*, The HoloCenter, Governor's Island, New York City (forthcoming).
- 2016 *Ear Taxi*, Chicago, IL, 10/10/2016. Performed *New Atlantis*, networked performance, with Roland Cahen, Peter Sinclair, Peter Gena, Jonathan Tanant, Rob Hamilton.
- 2016 *Saratoga International Film Festival*, City Center, Saratoga, NY. Exhibited *Traversing the Sectors*, virtual reality artwork for Oculus Rift with Silvia Ruzanka.
- 2016 *Immersive Worlds: Science, Narrative and the Arts*, Baruch Performing Arts Center, New York, NY. Exhibited *Traversing the Sectors* and *Spiritualist Telegraph*, virtual reality artworks for Oculus Rift with Silvia Ruzanka. Curated by Katherine Behar.
- 2016 *New Atlantis*, Le Cube, Paris, FRANCE. Performed *New Atlantis*, networked performance, with Roland Cahen, Peter Sinclair, Peter Gena, Jonathan Tanant.

- 2015 *6th Shenzhen-Hong Kong Bi-City Biennale of Urbanism/Architecture: Re-Living the City*, Shenzhen, CHINA. Exhibited *Archipelago*, interactive installation with Silvia Ruzanka and Young Suk Lee. Curated by Drura Parrish. Catalogue.
- 2015 *Filmatic Festival*, University of California San Diego, CA. Exhibited *Special Treatment*, virtual reality artwork for the CAVE with Geoff Baum, Todd Margolis, Keith Miller, Ellen Sandor.
- 2015 *Art Souterrain*, Montreal, CANADA. Exhibited *(In)Security Camera*, interactive installation with Silvia Ruzanka and Dmitry Strakovsky.
- 2014 *Remembering/Forgetting*, ArtScience Museum, SINGAPORE. Exhibited *Special Treatment*, virtual reality artwork for the CAVE with Geoff Baum, Todd Margolis, Keith Miller, Ellen Sandor.
- 2014 *AHÖM*, The Museum of Human Achievement, Austin, TX. Exhibited *Better Living Through Modularity*. Curated by Katie Rose Pippin.
- 2013 *There's An App For That Shirt!*, Monmouth University, West Long Beach, NJ. Augmented reality performance with Katherine Behar and Silvia Ruzanka.
- 2012 *OUT of the BOX*, Mobile Augmented Reality Exhibition, San Francisco, CA, 2012. Exhibited *N. with Telegraph*. Curated by Todd Margolis and Tracy Cornish.
- 2011 *First Night Saratoga: Hands-Off Arcade*, Saratoga Springs City Center, Saratoga Springs, NY. Exhibited *Magician* and *Levitation*, interactive installations with Silvia Ruzanka.
- 2011 *Arts For A Better World*, Art Basel Miami Beach satellite exhibition, Miami Beach, FL. Exhibited *Special Treatment*, virtual reality artwork for the CAVE with Geoff Baum, Todd Margolis, Keith Miller, Ellen Sandor.
- 2011 *The Fourth Moscow Biennale: Interior-ity*, Project Factory, Moscow, RUSSIA. Exhibited *The Grind*, artgame, with Silvia Ruzanka and Rodger Ruzanka. Curators: Lana Zaytseva, Dmitry (Dima) Strakovsky.
- 2011 *Artistic Mediums II*, The New Art Center in Newton, Newtonville, MA. Exhibited *Dataghost Defragmenter*, artware CD-ROM.
- 2010 *Intermedia Festival*, Informatics and Computer Technology Complex, IUPUI, Indianapolis, IN. Exhibited *Better Living through Modularity*, VR artwork for the CAVE.
- 2010 *Liminality : A Mixed Reality Exhibition of Second Life Art*, Antenna Gallery, Chicago, IL. Exhibited *Sounder and Relay*, realtime 3D with electronics, with Silvia Ruzanka. Curated by Patrick Lichty.
- 2009 *PlayUp*, Olson Gallery, Northern Illinois University, DeKalb, IL. Exhibited *Philosopher Deathmatch*, artgame.
- 2009 *Faculty Projects*, Betty Rymer Gallery, The Art Institute of Chicago, Chicago, IL. Exhibited *Sounder and Relay*, realtime 3D with electronics, with Silvia Ruzanka.
- 2008 *Artistic Mediums: Revelations of the Invisible*, Detroit Museum of New Art, Pontiac, MI. Exhibited *Dataghost Defragmenter*, artware CD-ROM.

- 2007 *Crossmediale 2*, Gosia Koscielak Studio and Gallery, Chicago, IL. Exhibited *Becoming*, realtime 3D, with Silvia Ruzanka.
- 2006 *Medi@terra Festival: Gaming Realities*, Athens, GREECE. Exhibited *Philosopher Deathmatch*, artgame.
- 2006 *Structural Elements: Chicago New Media Artists*, Chicago Living Arts, Chicago, IL. Exhibited *Better Living Through Modularity*, virtual reality artwork for the CAVE.
- 2006 *The Human Zoo*, MoKS Center for Art and Social Practice, Mooste, ESTONIA. Exhibited *Information Farm*, live performance and Internet art, with Silvia Ruzanka and Katherine Behar.
- 2006 *Crossmediale 1*, Gosia Koscielak Studio and Gallery, Chicago, IL. Exhibited *Better Living through Modularity*, virtual reality artwork for the CAVE.
- 2006 *Projecting Off the Wall*, ITP, New York University, NY. Exhibited *(In)Security Camera*, interactive installation with Silvia Ruzanka and Dmitry Strakovsky.
- 2005 *Wired NextFest*, Navy Pier, Chicago, IL. Exhibited *Syntheology*, virtual reality telepresence installation, with Geoff Baum, Dan St. Clair, Robb Drinkwater, Eleni Kostis, Mark Baldrige, Hyunjoo Oh.
- 2005 *NOVA Young Art Fair*, NOVA Studios, Chicago, IL. Exhibited *(In)Security Camera*, interactive installation with Silvia Ruzanka and Dmitry Strakovsky.
- 2004 *IntiMachine: The Art of Intimacy, Expectation, and Behavior*, Art Interactive, Cambridge, MA. Exhibited *(In)Security Camera*, interactive installation with Silvia Ruzanka and Dmitry Strakovsky.
- 2004 *VII Symposium on Virtual Reality*, São Paulo, BRAZIL. Exhibited *Spinlock*, virtual reality installation, with sound by Rodger Ruzanka.
- 2004 *The Alchemy of Tulips*, dance performance, Gallery 37 Storefront Theater, Chicago, IL. Interactive floor projections for set design. Director: Joseph Ravens.
- 2004 New Forms Festival: Technography, Vancouver, BC, CANADA. Exhibited *(In)Security Camera*, interactive installation with Silvia Ruzanka and Dmitry Strakovsky.
- 2004 *Power Series and Effective Computation*, DeadTech, Chicago, IL. Three person show. Exhibited *Binary Quicksort*, generative artwork.
- 2003 *Inter(Act)*, Open End Art, Chicago, IL. Exhibited *(In)Security Camera*, interactive installation with Silvia Ruzanka and Dmitry Strakovsky.
- 2002 *Boston Cyberarts Festival*, Boston, MA. *The Jackals*, performance and workshop by TangentLab Collective (Ben Chang, Mary Lucking, Silvia Ruzanka, Andrew Sempere, Dmitry Strakovsky).
- 2002 *SIGGRAPH Art Gallery*, San Antonio, TX. *The Jackals*, performance and workshop by TangentLab Collective (Ben Chang, Mary Lucking, Silvia Ruzanka, Andrew Sempere, Dmitry Strakovsky).
- 2002 *plugANDplay*, ArtsWatch, Louisville, KY. Exhibited *Guitar Gods*, interactive installation with Dmitry Strakovsky and Chris Sorg.

- 2002 *Summer Solstice*, Museum of Contemporary Art, Chicago, IL *The Jackals*, performance and workshop by TangentLab Collective (Ben Chang, Mary Lucking, Silvia Ruzanka, Andrew Sempere, Dmitry Strakovsky).
- 2002 *system_project*, RedNoFive, Chicago, IL. Exhibited *Fireflies*, interactive installation.
- 2002 *Version>02 [Digital Arts Convergence]*, Museum of Contemporary Art, Chicago, IL *The Jackals*, performance and workshop by TangentLab Collective (Ben Chang, Mary Lucking, Silvia Ruzanka, Andrew Sempere, Dmitry Strakovsky).
- 2001 *Broken Space*, Open End Art, Chicago, IL.
- 2001 *A Haunted Landscape*, 1926 Gallery, Chicago, IL. (catalogue) Exhibited *Dataghost Defragmenter*, artware CD-ROM.
- 2001 *File 2001 International Electronic Language Festival*, Museum of Image and Sound, São Paulo, BRAZIL. Exhibited *Image Pillager*, internet art.
- 2001 *net_working*, Watershed Media Centre, Bristol, ENGLAND. Exhibited *Image Pillager*, internet art.
- 2001 *seARchTEngines: d(sin)formacion - Audiovisual Festival of Navarra*, Navarra, SPAIN. Exhibited *Image Pillager*, internet art.
- 2000 *Last, First, Middle Initial*, 1926 Gallery, Chicago, IL. Collaborative, networked interactive installation with Silvia Ruzanka, Dmitry Strakovsky, Andrew Sempere, Mary Lucking, David Grant, Jeff Holmes, and Jinah Roh.

Interactive Media Design

- 2008 *Domestic Tension*. Client: Wafaa Bilal. Web-controlled paintball gun for Bilal's month-long performance artwork. Role: design and programming.
- 2008 *Realtime Earthquake Map*. Ben Chang and Silvia Ruzanka. Client: The Field Museum, Chicago. Interactive exhibit design for the traveling exhibition *Nature Unleashed*. Role: design and programming.
- 2007 *DIY Timeline*. Ben Chang and Silvia Ruzanka. Client: Anne Dorothee Boehme and A+D Gallery. Website for the exhibition *Pass it On! Connecting Contemporary Do-It-Yourself Culture*. Role: design and programming
- 2005 *Exhibition Studies Viewbook Series CD-ROM's*. Client: SAIC Exhibition Studies Program. CD-ROM's accompanying the annual Exhibition Studies Program viewbook from 2002 to 2005.
- 2003 *The Consistency of Shadows*. Client: Anne Dorothee Boehme and The Betty Rymer Gallery. Interactive CD-ROM artist book catalog for the exhibition *The Consistency of Shadows: Exhibition Catalogs as Autonomous Works of Art*. Role: design and programming.
- 1999 *Transmute*. Ben Chang and Kim Collmer. Client: Joshua Decker and The Museum of Contemporary Art, Chicago. Interactive exhibit and website for the exhibition *Transmute*. Role: programming.

Curating

- 2010 *Art in VR 2010*, IEEE Virtual Reality, Westin Waltham-Boston, Waltham, MA. Exhibited artists: Mark Baldrige, Margaret Dolinsky, Roger Wakeman, Kegan McGurk, Applied Interactives, art(n) Laboratories.
- 2010 *Art in VR 2010*, SPIE Electronic Imaging, San Jose Convention Center, San Jose, CA. Exhibited artists: Mark Baldrige, Margaret Dolinsky, Roger Wakeman, Kegan McGurk, Applied Interactives, art(n) Laboratories, Sheldon Brown, Patrick Lichty
- 2007 *Glitches, Bits, and Switches*, Alogon Gallery, Chicago, IL. Exhibited artists: Mark Baldrige, Katherine Behar, Wafaa Bilal, Ben Carney, Galen Curwen-McAddams, Margaret Dolinsky, John Dugan, Morgan Higby-Flowers, Patrick Lichty and Second Front, Matt Nelson, Silvia Ruzanka, Roger Wakeman.

Conference Proceedings

- 2014 Benjamin Chang and Marc Destefano, "Game engines and immersive displays", *Proc. SPIE* 9012, The Engineering Reality of Virtual Reality 2014, 90120G (February 28, 2014).
- 2013 Silvia Ruzanka, Ben Chang and Katherine Behar, "There's an app for that shirt! Evaluation of augmented reality tracking methods on deformable surfaces for fashion design", *Proc. SPIE* 8649, The Engineering Reality of Virtual Reality 2013, 86490D (March 4, 2013).
- 2012 Benjamin Chang, Lee Sheldon, Mei Si and Anton Hand, "Foreign language learning in immersive virtual environments." *Proc. SPIE* 8289, The Engineering Reality of Virtual Reality 2012, 828902 (February 9, 2012).
- 2011 Benjamin Chang, "NMC Sponsored Panel, Fight The Power: Open Source, Free Software, And Critical Digital Practice," *Media-N* 7.2, 2011.
- 2011 Silvia Ruzanka, Benjamin Chang, and Katherine Behar, "Avatar Impotence: On 'User Will,' 'Avatar Agency,' and 'System Control' in Second Life." In *Proceedings of the 2011 International Conference on Cyberworlds (CW '11)*. IEEE Computer Society, Washington, DC, USA, 227-231.
- 2010 Ben Chang, "Art in virtual reality 2010", *Proc. SPIE* 7525, The Engineering Reality of Virtual Reality 2010, 75250I (February 4, 2010).
- 2009 Silvia Ruzanka and Ben Chang, "Dots and dashes: art, virtual reality, and the telegraph," *Proc. SPIE* 7238, The Engineering Reality of Virtual Reality 2009, 723808 (January 26, 2009).
- 2006 Baum, Geoffrey, Marientina Gotsis, Benjamin Chang, Robb Drinkwater, and Dan St Clair, "Synthecology: sound use of audio in teleimmersion", *Proc. SPIE* 6055, Stereoscopic Displays and Virtual Reality Systems XIII, 605522 (January 30, 2006).

Refereed Journal Articles

- 2010 "Dialogue with Ben Chang and Silvia Ruzanka" in "Dynamic Coupling", Jessica Westbrook and Adam Trowbridge, eds. *Media-N* 6.2, 2010.

Professional and Public Lectures

- 2017 "Curating Mixed Realities," panel, 6/23/17, The HoloCenter, Governor's Island, New York City (forthcoming)

- 2016 Games and Public Policy Roundtable, NYU Game Center, Brooklyn, New York, September 20, 2016
- 2016 Cognitive Horizons Network Centers Presentation, Cognitive Colloquium, IBM T.J. Watson Research Center, Yorktown Heights, NY, September 19, 2016
- 2016 "Awakening the Senses: Animation, Music, and the Importance of Good Cooking", Pre-Concert Lecture Series, Saratoga Performing Arts Center, August 6, 2016
- 2016 "Immersive Science: Design and Technology", invited panelist, "Immersive Worlds: Science, Narrative and the Arts," Baruch Performing Arts Center, New York, NY, April 7, 2016
- 2016 "High Life": Helping High Risk Urban Teens Create a Pot Prevention Game App" Co-Presentation with Laquana Cooke, RealTalk teens and Alliance for Positive Health, YTH Live, the youth + tech + health conference San Francisco, California, April 2016.
- 2016 "Metatuning Accessibility: How High Life! Redefined Collaborative Design" Co-Presentation with Laquana Cooke, Darryl Nunn, and RealTalk teens, Different Games 2016, Brooklyn, NY, April 2016.
- 2016 "Time Becomes a Loop", Five College Digital Humanities Lecture Series 2015-2016: Reality Would Have to Begin, Amherst College, February 25, 2016
- 2015 "Using a CAVE for Experiments in Cultural Heritage", Designing Digital Heritage Network: Designing Game-Based Experiences for Heritage Users Beyond the Museum, University of Skövde, Sweden, December 17-18, 2015
- 2015 Guest co-teacher, New Atlantis, week-long intensive workshop / experimental studio, ENSCI Les Ateliers (École Nationale Supérieure de Création Industrielle), Paris, September 14-18, 2015
- 2015 Invited workshop contributor, Serious Games Focus Group for Emergency Managers, Lincoln Labs, MIT, Cambridge, MA, August 17, 2015
- 2015 "Motion and Melody: Music and Animation from Pencils to Pixar", pre-concert talk, Saratoga Performing Arts Center, August 9, 2015
- 2015 Invited workshop contributor, Games for Learning Summit, NYU Global Center for Academic and Spiritual Life, New York, April 21 2015.
- 2015 Colloquium presenter, Prospects for the Digital Humanities and the Arts, Clark Art Institute, Williamstown, MA, April 10-12, 2015.
- 2014 Invited speaker, Designing Digital Culture Seminar, University of Skövde, Sweden, December 15-16, 2014.
- 2011 Conference Presentation, "Avatar Impotence: On 'User Will,' 'Avatar Agency,' and 'System Control' in Second Life" Arts & Virtual Worlds 2, Cyberworlds 2011, Banff, Canada, October 5, 2011
- 2011 Conference Presentation, Avatar Impotence: On 'User Will,' 'Avatar Agency,' and 'System Control' in Second Life' and 'Virtual Worlds and the Spiritualist Telegraph', Creating Second Lives 2011: Blurring Boundaries, Bangor University, North Wales, UK, Sept. 8-9, 2011

- 2011 Invited speaker, Thinking Creatively Conference, Kean University, Union, New Jersey, April 8, 2011
- 2011 Visiting Artist Lecture, Department of Interactive Arts and Media, Columbia College Chicago, March 10, 2011
- 2011 Moderator, "Fight the Power: Open Source and Critical Digital Practice", College Art Association Conference, New York, February 2011
- 2010 Panelist, "New Media Curriculum Roundtable", New Media Caucus, Columbia College Chicago, February 2010
- 2009 Panel Chair, "Software", panel discussion with Robert Aish and Andrew Marsh, Autodesk, ACADIA 09: reForm(), Chicago, IL
- 2009 Panelist, "Scripting Summit", ACADIA 09: reForm(), American Institute of Architects, Chicago, IL
- 2009 Artist panel, "Play Up!" Northern Illinois University, DeKalb, IL
- 2009 Panelist, "Videogames and Art", New Media Caucus 2009, SCI-Arc, Los Angeles, CA
- 2009 Visiting artist lecture, Center for Research in the Computing Arts, University of California, San Diego, CA
- 2006 Visiting artist lecture, "Sound and Virtual Environments", Northwestern University, Evanston, IL
- 2005 Visiting Artist lecture, École Supérieure d'Art d'Aix-en-Provence
- 2005 Visiting Artist lecture, DXArts, University of Washington, Seattle, WA
- 2005 Panelist, "New New Media", NOVA Young Art Fair, Chicago, IL
- 2005 Roundtable Moderator, "VR in Education", Share, Share Widely / Institute for Distributed Creativity, The Graduate Center, City University of New York
- 2005 Artist Talk, Open-Node / Upgrade! Chicago, Chicago, IL
- 2005 Visiting Artist lecture, SCAN Sound Lab, École Supérieure Villa Arson, Nice, France,
- 2002 Artist Talk, "Signal::Nose / plugANDplay", ArtsWatch, Louisville, KY
- 2002 Panelist, "Creative Technology as Weaponry", Version>02, Museum of Contemporary Art, Chicago, IL
- 2001 Visiting Artist Lecture, Photography Department, Columbia College, Chicago, IL

Grants Funded

- 2015 *Conduits: MSHS Translational Science Hub*. Ben Chang (PI), Shawn Lawson, Kathleen Ruiz, Mei Si. The Icahn School of Medicine at Mount Sinai, \$672,852, 8/15/15 – 3/31/20. Subaward on *MSHS Translational Science Hub, UL1 TR001433*, NIH.

- 2015 *Tech Valley Digital Gaming Hub*. Ben Chang (PI), Jason Kuruzovich, James Spencer, Esther Vargas. Empire State Development Corporation, \$450,000, 1/15/2015 – 1/14/2018.
- 2012 *MRI: Development of the Collaborative-Research Augmented Immersive Virtual Environment Laboratory (CRAIVE-Lab)*. Jonas Braasch, Ben Chang (Co-PI), Barbara Cutler, Johannes Goebel, Richard Radke. NSF, \$300,001, 10/01/2012 -09/30/2014.
- 2011 *Emergent Reality Lab*. Lee Sheldon, Ben Chang (Co-PI), Mei Si. Rensselaer Polytechnic Institute Seed Grant, \$80,000, 1/1/ 2011- 12/31/2012.

Press, Reviews

- 2017 “Tax Credits for the Video Game Industry in NY,” interviewed on Capital Tonight, Spectrum News. <http://www.twcnews.com/nys/capital-region/capital-tonight-interviews/2017/03/24/video-game-panel-032417.html> , accessed 3/24/2017.
- 2015 “(Mis)Behavioral Objects: Empowerment of Users Versus Empowerment of Objects,” Samuel Bianchini, Rémy Bourganel, Emanuele Quinz, Florent Levillain, Elisabetta Zibetti, in *Empowering Users Through Design*, David Bihanic, Ed., Springer.
- 2014 “11 Art and Design Projects that Will Change the Way You Look At Security Cameras,” Rob Walker, Yahoo!Tech, June 3, 2014. <https://www.yahoo.com/tech/11-art-and-design-projects-that-will-change-the-way-you-87727669654.html>
Accessed 9/15/2015.
- 2014 “Art Focused and Distracted: Three New Media Exhibitions Curated by Joshua Decter,” Zachary Kaplan, Rhizome, April 28, 2014. <http://rhizome.org/editorial/2014/apr/28/art-focused-and-distracted-joshua-decter/>.
Accessed 9/15/2015.
- 2015 “Les cinq oeuvres incontournables de l’Art Souterrain 2015,” Lili Mercure, Le Culte, 3/15/2015. <http://leculte.ca/arts-visuels/les-cinq-oeuvres-incontournables-de-lart-souterrain-2015-2/http://leculte.ca/arts-visuels/les-cinq-oeuvres-incontournables-de-lart-souterrain-2015-2/>
Accessed 9/15/2015.
- 2011 “Hands Free Arcade at Saratoga First Night,” Mary Martialay, The Approach, December 5, 2011.
- 2011 “Art Unleashed,” Yael Goldman, Saratoga Today Online, December 22, 2011.
- 2011 “Arcade invites players to get in the game,” Doug Gruse, The Post-Star, December 29 2011.
- 2011 “Interview: Ben Chang, artist, gamer, philosopher, guitar god.” gamescenes: art in the age of video games, www.gamescenes.org, November 9, 2011.
- 2011 “The New Cultural Form: Perfection versus Mortality in Games and Simulation at Rensselaer.” Inside Rensselaer, Volume 5, Number 8, April 29, 2011.
- 2005 “Wired NextFest 2005 hosted by the Discovery Channel’s MythBusters.” Discovery Channel, June 25 2005.

- 2005 "The Best of Wired NextFest 2005." Filter, G4 Network, June 2005.
- 2005 "'Intimachine' weds man, his mechanisms." Joanne Silver, Boston Herald, January 14, 2005.
- 2005 "Intimachine: The Art of Intimacy, Expectation and Behavior." Cate McQuaid, Boston Globe, January 13, 2005.
- 2004 "(In)Security Camera, una tipica relazione sociale." Neural.it. May 5, 2004.
- 2003 "Robot Act." Della Watson, *Dossiere*. 1.2 (2003): 18-19.
- 2002 "In Pictures: Hi-Tech Art Attack." BBC News. 14 August 2002.
- 2002 Go Digital Radio/Webcast. BBCi. 5 August 2002.
- 2002 "Interact with Art at Siggraph." Wired News. 27 July 2002.
- 2002 Artbeat. WTTW 11 Chicago. April, 2002.
- 2002 "Version02, festival cultura digitale radicale." Neural.it 18 April 2002.