

Toru Hasegawa

Selected CV | Sep 2014 | toru@proxyarch.com | +1 347 804 7707 | 141 Amity St Apt 6, Brooklyn, NY 11201 U.S.A.
Toru Hasegawa, in collaboration with Mark Collins, is principal of Proxy Design Studio LLC, an innovation-focused design firm working across a range of scales and platforms. Proxy works on a wide range of projects, from architecture and design to research in CNC fabrication, book publishing and software development. More information can be found at <http://www.proxyarch.com>

Toru is also co-director of the **GSAPP Cloud Lab**. The Cloud Lab is an experimental lab that explores the design of our environment through emerging technologies in computing, interface and device culture. The lab is directed by Mark Collins and Toru Hasegawa and resides at the Graduate School of Architecture, Planning & Preservation, Columbia University. More information can be found at <http://thecloudlab.org>

Toru is also a founder and co-creator of **The Morpholio Project**, a group of mobile applications built for creative empowerment. The project includes thousands of members and a suite of design tools powered through a shared cloud infrastructure. More information can be found at <http://www.morpholioapps.com>

Honors and Awards

- 2010 The 2010 International Iakov Chernikhov Prize, Nominated, Moscow, Russia
- 2006 Columbia University Honors Award for Excellence in Design - Graduating Prize

Selected Exhibitions and Publications

- 2014 「マテリアライジング・デコーディング 情報と物質とそのあいだ」 Interviewed August 2014
Van Alen Institute "How does the Brain Respond to the City?" Co-organizer and Speaker, May 2014
Atlantic Cities "The Quest to Measure the Brain's Response to Urban Design" May 2014
Gizmodo.com "An iPhone App Knows How You Feel By Checking Your Pulse" April 2014
Shapeways.com Featured Artist, Mechaneu V1
Landscape Architecture Magazine "Do Over...and Over: Morpholio Trace 2.0" May 2014
- 2013 **Fast Company** "Here's A Machine That Shows What 3-D Printing Can Really Do" December 2013
Architect Magazine "Mechaneu Pushes the Boundaries of Current 3D Printing Tech" December 2013
Gizmodo.com "Mind-Boggling Spherical Gear Made from 3D-Printed Moving Parts" December 2013
3D Printing Industry "A Thinking Person's 3D Printed Gear-Ball" December 2013
Wired.com "This iPad Drawing App Brings Tracing to the Touchscreen" December 2013
Fast Company "Morpholio 2.0: A Portfolio App With a Built-In Studio Crit" September 2013
Design Intelligence: Advanced Computational Research DADA 2013 "Brain Hacking" July 2013
「マテリアライジング展 情報と物質とそのあいだ 23名の建築家・アーティストによる思索」 June 2013
- 2012 **Architectural Record** "Leaving a Trace with an iPad" November 2012
Money Today Network "The Cloud Computing Boom" (MTN) November 2012
Architect 50 Leadership Lab "Linking Big Data with Big Design" October 2012
Architect Magazine "Building App-titude" August 2012
Architect Magazine What's Next Video Series "Computational Literacy and Programming" June 2012
Metropolis Magazine "Possibilities of Touch" March 2012
Going Viral: Blurred Borders Presenter, "Morpholio" NYC Center for Architecture May 2012
- 2011 **Perspecta 44: Domain "Processing Architecture"** with Casey Reas & Ben Fry September 2011
Scripting Cultures: Architectural Design and Programming Contributor, 2011
Volume: Internet of Things Archis 2011 #2 "Smart Environments" "The Importance of Random Learning"
A+U 2011:10 Manhattan Grid September 2011
THERE 06: Craft, "Good Objects Make Themselves". University of Minnesota
ALGODE 2011 Algorithmic Design for Architecture Conference, "Human Computer Interaction in Architecture: Exploring the Brain-Body-Environment Continuum"
Machinic Processes: Architecture Biennial Beijing 2010 "Computing Kaizen" studio,

- Cloud Computing and Architecture Symposium, Osaka Sangyo University, April 2013
- 2010 **A+U 2010:5 “New Directions: Sustainability and Technology in New York”**
Programming Bodies: Last Computing Counter-Culture Symposium Hosei University March 2013
Processing.org Digital Exhibitions, “Computing Kaizen”
AIA New York Design Awards Program, Toni Stabile Student Center, Architecture Honor Award
Japan Business Press “Small Shifts Bring Large Changes: Kaizen and Innovation”, 2010
- 2009 **Rouse[d] Exhibit**, invited exhibitor
The Brian Lehrer Show “Applying Government Data” BuildingBeat for iPhone, NYC BigApps
AD Closing the Gap: Information Models in Contemporary Design Practice Toni Stabile Student Center, Wiley April 2009
Out of Water: Innovative Technologies for Arid Climates “Liquid Wrap” April 2009
Algorithmic Design: New Methodologies of Architectural/Urban Design “I Remember You” Architectural Institute of Japan. Kajima Institute.
- 2008 **(Im)material Processes: New Digital Techniques for Architecture** Beijing Architecture Biennial 2008
Oficina des Ideias Exhibition supporting the release of Informal Toolbox
Informal Toolbox Co-Editor, Author and Designer. 2008 ISBN 9780982078303
SUPERFRONT “Something About Rooms and Walls” StatWall April 2008
- 2007 **ScriptedByPurpose: Explicit and Encoded Processes Within Design** F.U.E.L. Collection “Rich Fields”
Maker Faire 07 Presenter, Happy Family Lamp
Architecture Week “Strutting Space” Trusset Wall
- 2006 **ON MADRID** “Architecture Made in the USA” No 17 2006
Columbia 125th Anniversary ‘Trusset wall’ GSAPP Office of Development + Office of Special Events
Architecture Biennial Beijing 2006 “Emerging Talents, Emerging Technologies” Happy Family Lamp and (un)Natural Selection
Build Boston 2006 ‘Topological House’ BSA’s Young Designers Exhibition
ACADIA 2006: Synthetic Landscapes
ACADIA 2006: Proceedings - The hexEnvelope system: a cross-platform embedding of material and software logic into descriptive geometry
Imagined Spaces: Emerging New York City Architects Picasso Mio Gallery, Barcelona Spain.
(un)Natural Selection Avery Hall, Columbia University
- 2003 **Architecture Biennale in Rotterdam** - Thesis Project chosen for the Japan Team

Professional Experience

- 2011 - present **The Morpholio Project** - Founding Partner
- 2011 - present **The GSAPP Cloud Lab** - Co-director with Mark Collins
- 2006 - present **Proxy Design Studio** - Founder and Principal
- A research based practice that looks for concurrent ideas and processes across disciplines, defining a new domain of architectural production. Recent projects include:
- Modular Ceiling Systems for Arktura**, a commissioned series to be retailed by Arktura.
- Solar Chimney**, a continuing research into green building structures and urbanism.
- Melody Shafie Memorial**, a sculpture that honors the memory of a victim of Neuroblastoma. The memorial provides a contemplative space for the family as well as an educational tool for the Melody Shafie Foundation.
- NYU Advanced Media Studio**, a rehabilitation of an existing space that serves the NYU community with Rapid Prototyping services. The new space features the potential of RP equipment to realize tangible, intelligent spaces.
- FDNY Engine House Facade**, a procedurally generated façade pattern produced in collaboration with Marble Fairbanks architects. Using custom software, Proxy designed a complex façade that is based on fluid surfaces and light refraction.
- “I Remember You...” House in Tokyo, Japan with N Maeda Atelier**, a constrained volume

made maximizing natural light the top priority. Using solar analysis tools and custom software, Proxy and the N Maeda Atelier were able to create a unique home that strategically opens itself to the available light.

The School of Journalism Reading Room, with Marble Fairbanks, a folded metal ceiling that features a complex perforation pattern generated from acoustic simulation. 3000 sf of powder-coated, CNC cut stainless steel panels.

The Trusset, a structural system that can assume an arbitrary shape and is suited for complex shapes, rapid deployment and unskilled assembly. Research is supplemental to initial design and prototyping by Phillip Anzalone and Cory Clarke in the context of the GSAPP FABCON Lab.

The Topological House, an experimental structure that uses topological description to motivate programmatic layout and construction technologies.

2005 **Xefirotarch** - Hernan Diaz Alonso, Project Team Captain for the P.S.1 "SUR" project

2004 **Diller Scofidio+Renfro** - Lincoln Center Visualization Team

nARCHITECT - P.S. 1 "Canopy" project

SUBDV - Franklin Lee/Anne Save de Beurecueil, Chinese Competition

2002 **Kawaguchi Mamoru & Naito Hiroshi** - Competition of Tenjin (China) team (First Prize)

Maeda Norisada Atelier - 3D graphics, physical model

Education

2006 **Columbia University**, GSAPP - Masters of Architecture, New York

2003 **Hosei University** - Bachelor of Science in Architecture, Tokyo

Academic Teaching Experience

2006 – present

Studio Advanced Studio IV: Future Fulfillment

Columbia University GSAPP

taught in conjunction with Mark Collins

Studio Advanced Studio VI: House of the (Present) Future

Columbia University GSAPP

taught in conjunction with Mark Collins

Studio Advanced Studio VI: Beyond Realtime - Signal and Noise in the Quantified House

Columbia University GSAPP

taught in conjunction with Mark Collins

Studio Advanced Studio VI: Brain Hacking - Preferences in Architecture

Columbia University GSAPP

taught in conjunction with Mark Collins

Studio Advanced Studio : Participating Bodies

Washington University of St. Louis

taught in conjunction with Mark Collins

Studio Advanced Studio VI: Computing Kaizen,

Columbia University GSAPP

taught in conjunction with Mark Collins

Seminar Search: Advanced Algorithmic Design, Columbia University GSAPP

taught in conjunction with Mark Collins

The seminar attempts to bring genetic algorithms, and other advanced algorithmic techniques, into a productive discourse within the worlds of architecture design and theory. This seminar surveys a broad set of tactics for algorithmic deployment of architectural thinking.

Seminar Fabricating Information, NYU Interactive Telecommunication Program, Tisch School of the Arts
taught in conjunction with Mark Collins

The seminar functions as both an introduction to different CNC + prototyping equipment as well as a studio in which to test the possibilities and constraints of new methods of production.

Seminar Digital Detailing : Testing & Analysis. Columbia University GSAPP
taught in conjunction with Mark Collins

This seminar explores simulation and prototyping as different modalities in which feedback can be explored and incorporated back into design.

Legacy

Workshop 2GBX Workshops, Southern California Institute of Architecture
taught in conjunction with Mark Collins, Spring 2010

Using Processing to untangle the relationships between geometry, human capacity for perception, computational structures and algorithms and output protocols and capacities (such as CNC machines, monitors, LCD displays).

Studio Slum Lab Studios, Columbia University, GSAPP

taught in conjunction with Alfredo Brillembourg and Hubert Klumpner, from 2006 to 2009

The Sustainable Urban Model (Slum) studios explore the relationship between complexity, mapping and growth models in the context of 3rd world slum conditions. The studios form the basis for the GSAPP Slum Lab, an initiative to direct design and technology towards underserved populations.

Seminar 'Digital Detailing/Complex Assemblage' Columbia University, GSAPP
taught in conjunction with Mark Collins and Phillip Anzalone, Spring 2007

Intended not only as a forum to develop the relationship between parametric design and CNC fabrication, the class also seeks to explore alternative methods and economies of production, ranging from industrial manufacturing, micro-economic fabrication, personal fab, and pre-fab.

Lectures

2014	3d Printer World Expo, Seattle 3d Printer World Expo, Los Angeles	Mechaneu v1 Mechaneu v1
2013	Bilbao AA Visiting School, Bilbao Rome AA Visiting School, Rome (Skype) AEC Technology Symposium, USA	Architecture for the Amplified Human Architecture for the Amplified Human Hello World App workshop
2012	Rio De Janeiro AA Visiting School StudioXTokyo, Japan Tokyo University, Japan	Proxy - Recent Works + workshop Proxy - Recent Works Proxy - Recent Works
2011	Pecha Kucha New York, USA Algode International Symposium, Japan Okayama Prefecture University, Japan Okayama Prefecture University, Japan AIA Brain Storming Japan, New York	500 Bonsai Japan HCI Code Introduction to Processing workshop Moderator
2010	Hosei University, Japan Hosei University, Japan	Code Processing 5 day workshop

	RSGG @ Tokyo University, Japan	Code
	Nebraska University Lincoln, USA	Evolution of Proxy - HCI
2009	Hosei University, Japan	Proxy - Recent Works
	Hosei University, Japan	Processing 5 day workshop
	University of Toronto, Canada	Proxy - Recent Works