

Toru Hasegawa

Selected CV | July 2010 | toru@proxyarch.com | +1 347 804 7707 | 155 West 74th St. #3B NYC, NY 10023 U.S.A.

Toru Hasegawa, in collaboration with Mark Collins, is principal of **Proxy**, a multi-platform design firm that explores architecture as an abstract informational system, interfacing through tools and imagery with many others - including the worlds of science, computation, and medicine. **Proxy** specializes in the integration of fabrication methodologies with software processes in order to open a new territory of work for architects. **Proxy** works on a diverse array of projects, ranging between custom software, product design and complex building structures. <http://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>

Honors and Awards

2006 **Columbia University Honors Award for Excellence in Design** - Graduating Prize

2002 **Best Design Award** - GINZA 2020 Chaos Project, Hosei University, Japan

Selected Exhibitions and Publications

Forthcoming

Digispeak, edited by Gregory Luhan. Published by Taylor & Francis, London

Scripting Cultures: Architectural Design Primer, by Mark Burry. Published by John Wiley and Sons

Full-Scale, edited by Avery Digital Fabrication Laboratory

2010 **A+U "New Directions: Sustainability and Technology in New York"** Proxy is a featured architect in a focus on innovative architectural practices.

"Programming Bodies: Last Computing Counter-Culture" symposium hosted by Hosei University

Processing.org Digital Exhibitions, "Computing Kaizen"

AIA New York Design Awards Program, "Stabile Student Center" Architecture Honor Award

Featured in "Small Shifts Bring Large Changes: Kaizen and Innovation", Japan Business Press

2009 **Rouse[d] Exhibit**, invited exhibitor

Featured on The Brian Lehrer Show "Applying Government Data" Proxy's *BuildingBeat for iPhone* featured as part of the NYC BigApps Competition.

AD Closing the Gap: Information Models in Contemporary Design Practice edited by Richard Garber

The Columbia University School of Journalism interior, a collaboration with Marble Fairbanks, is featured.

Out of Water: Innovative Technologies for Arid Climates University of Toronto

Proxy exhibits *Liquid Wrap*, a system for water purification using computational form and rapid prototyping in the context of water stressed populations. Curated by Aziza Chaouni and Liat Margolis.

Algorithmic Design: New Methodologies of Architectural/Urban Design Architectural Institute of Japan. Proxy's work with the N Maeda Atelier is featured in this publication, focusing on the solar cartography produced during the collaboration.

Published by the Kajima Institute

ISBN 9784306045231

2008 **(Im)material Processes: New Digital Techniques for Architecture**

Proxy exhibits recent work as part of the East Coast Section of the 2008 Beijing Architecture Biennial, curated by Neil Leach and Alisa Andrasek..

Oficina des Ideias Exhibition supporting the release of *Informal Toolbox*

Filling a large public space in the Edificio Matarazzo, São Paulo Brazil, the exhibition featured images and text from the *Informal Toolbox*.

Informal Toolbox Co-Editor and Designer

In 2008, the SLUM LAB visited Paraisópolis, a Brazilian favela in the heart of São Paulo and site of upgrading efforts by the municipality. The collaboration between these entities is presented alongside a series of architectural 'tactics' conceived to integrate and transform sprawling tracts of informal housing that support a dynamic social and spatial life.

ISBN 9780982078303

SUPERFRONT - "Something About Rooms and Walls"

Proxy exhibits the StatWall, a surface visualization of NYC 311 statistics.

2007 **ScriptedByPurpose** - "explicit and encoded processes within design"

- Proxy exhibits four works, entitled 'Rich Fields' as part of the F.U.E.L. Collection's ScriptedByPurpose show, curated by Mark Fornes and Skylar Tibbits

Maker Faire 07 - "Build, craft, hack, play, MAKE"

- The Happy Family Lamp is exhibited, event sponsored by the publishers of Make and Craft Magazine.

Strutting Space in Architecture Week - article detailing design and construction of the 'Trusset Wall'

2006 **Architecture 'Made in the USA' ON MADRID** no 17 2006 features Inside/Out as part of a feature on 'Imagined Spaces' exhibition

Columbia 125th Anniversary

- 'Trusset wall' exhibition sponsored by the GSAPP Office of Development + Office of Special Events

Architectural Biennial Beijing 2006 - "Emerging Talents, Emerging Technologies"

- Display includes the Happy Family Lamp and (un)Natural Selection

Build Boston 2006

the 'topological house' exhibited as part of BSA's Young Designers Exhibition

ACADIA 2006: Synthetic Landscapes

- The hexEnvelope prototype is included in a range of exhibits pertaining to the conference theme of digital design and production in a pluralistic software environment.

ACADIA 2006 Proceedings - The hexEnvelope system: a cross-platform embedding of material and software logic into descriptive geometry

Young Designers Digital Exhibition - featured in the BSA Design Gallery and at the Build Boston Gala. The Topological House, entry to plan-less house competition. proxy with David Brown.

Happy Family Lamp included in "arte/arquitectura" exhibition - Picasso Mio Gallery, Barcelona Spain. Prototype of Laminate Lamp also selected for display.

(un)Natural Selection – hexEnvelope metal structure exhibited - Avery Hall, Columbia University

2003 **Architecture Biennale in Rotterdam** - Thesis Project chosen for the Japan Team

Professional Experience

2006 - present **Proxy** architects, New York - Founding Partner and Director

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 VI: Computing Kaizen, Columbia University GSAPP

taught in conjunction with Mark Collins

The "Computing Kaizen" studio explored evolutionary architectural structures and their potential to anticipate change and internalize complex relationships. The studio used Processing, an open source platform for writing computational "sketches", to create intelligent building blocks that could self-organize into innovative forms.

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.

2006 - present **Lecturer** Columbia University, Hosei University (Japan), University of Toronto

2005 - present **Invited Jury Critic** Columbia University, Pratt Institute, New York University