Proceedings of the 30th Annual Conference of the Association for Computer Aided Design in Architecture, ACADIA
Table of Contents

Introductions
7 Nancy Yen-wen Cheng
ACADIA: an Ecosystem for Ideas
8 Aaron Sprecher, Shai Yeshayahu, Pablo Lorenzo-Eiroa
ACADIA 2010 Conference Chairs
On Responsive Information and Variations in Architecture
10 Aaron Sprecher
Informed Architecture
14 Shai Yeshayahu
Hack-on-Life
16 Pablo Lorenzo-Eiroa
In:forming a Critical Digital Architecture
Autonomy into Life

Keynote Essays
24 Antoine Picon
Digital Culture and Architecture: Evolution or Revolution
26 Georges Teyssot
The Membrane and the Fold
32 Karl Chu
The Global Brain
36 George L. Legendre
Parametric Surface Redux: IJP (Finally) Explained
40 Evan Douglis
In Search of Synthetic Immortality

Affluence - Work In Progress
45 Antonino Saggio
Information is the Raw Material of a New Architecture
49 Alexis Meier
Computation against design? Toward a New Logico-centrism in Architecture
53 Ingeborg M. Rocker
Interface: Between Analog and Digital Systems
61 Christian Derix
Mediating Spatial Phenomena through Computational Heuristics
67 David Gersten
Time Promise Land: Notes on our Current Geographies

Affluence - Peer Reviewed Essay Sessions
73 Anijo Punnen Mathew
Just in Place Learning: A Novel Framework for Employing Information in “Place” for Urban Learning Environments
81 Carlos L. Marcos
Complexity, Digital Consciousness and Open Form: A New Design Paradigm
88 Kyle Steinfeld, Pravin Bhiwapurkar, Anna Dyson, Jason Vollen
Situated Bioclimatic Information Design: a new Approach to the Processing and Visualization of Climate Data
97 Ming Tang, Jonathon Anderson
Mathematically Driven Forms and Digital Tectonic: A Formula for Realizing the Digital
103 Simon Flöry, Helmut Pottmann
Ruled Surfaces for Rationalization and Design in Architecture
110 Antonino Di Raimo
Caregiver Architecture: Human Body - Information - Cognition
117 Joanna Crotch, Robert Mantho, Martyn Horner
Social Spatial Genesis: Activity Centered Space Making
125 Paul Andersen, David Salomon
The Pattern That Connects
133 Jong Bum Kim, Mark J. Clayton
Support Form-based Codes with Building Information Modeling – The Parametric Urban Model Case Study
139 Nathan Miller
[make]SHIFT: Information Exchange and Collaborative Design Workflows
145 Danielle Briscoe
Information Controlled Erosion
151 Achim Menges
Material Information: Integrating Material Characteristics and Behavior in Computational Design for Performative Wood Construction
Confluence - Work In Progress

271 Mohamed Sharif
Notes on Abductive Experimentation

276 Nader Tehrani
Interview: On the Abstraction of Information and the Physical Tectonics of Materials

282 Mark Linder
Literal Digital

286 Scott Marble
Designing Design, Designing Assembly, Designing Industry

293 David Theodore
The Limits of Digital Architecture: Interpretation versus Data

Influence - Peer Reviewed Essay Sessions

183 Tim Ireland
Stigmergic Planning

190 Jennifer G. Wall, Erik D. Hegre
Expel Binary Assumptions

196 Vlad Tenu
Minimal Surfaces as Self-organizing Systems

203 Tomasz Jasklewiecz
(In)forming Interactive Architectural Systems, Case of the xMAIA Meta-model

211 Scott Crawford
A Breathing Building Skin

218 Kermin Chok, Mark Donofrio
Structure at the Velocity of Architecture

227 Flora Dilsy Salim, Hugo Mulder, Przemyslaw Jaworski
Demonstration of an Open Platform for Tangible and Social Interactions with Responsive Models

234 Nicholas de Monchaux, Shivang Patwa, Benjamin Golder, Sara Jensen, David Lung
Local Code: The Critical Use of Geographic Information Systems in Parametric Urban Design

243 Anke Pasold, Isak Worre Foged
Performative Responsive Architecture Powered by Climate

250 Isak Worre Foged, Esben Skouboe Poulsen
Environmental Feedback and Spatial Conditioning

258 Christina Dounpioti, Evan L. Greenberg, Konstantinos Karatzas
Embedded Intelligence: Material Responsiveness in Façade Systems

263 Michael Leighton Beaman, Stefan Bader
Responsive Shading | Intelligent Façade Systems

Authors Biographies

Credits

ACADIA 2010 Sponsors