Thursday
9:15 - 10:45
Session 1 | AI, Deep Learning, Data
Chair: Steven Strogatz
Towards an Autonomous Architecture
Tianhe Chen, Paragkak Tidke
A Plane of Thoughts
Sofia Vatsyayana, Ben Dickson
Robot X Machines
Anda Wang, Qing Ruan
Unsupervised Form Finding for Optimal Exploration
Shawn Shao, Sam Choy
Application of an Automatic Shape Clustering Method
Shoosemy Youn, Wei Yan

11:00 - 12:30
Session 2 | Patterns
Chair: Adam Marcus
Pattern Mapping
Elida Peregrin
Three-dimensional Translation of Japanese Kajigami Patterns
Gari Oyama
Waste Ornament
Katherine Tana
Bespoke Cast Facade
Maria Agnese Mikhale, Marisa Klaedtke, Theodor Kyros, Benjamin Oddenburger
Tensile Configurations
Khemane Tchou, Seohun Goo, Lu Yi-Ning Stell, Su Jiing Wies, Aliiapha Pal

2:30 - 4:00
Session 3 | Pavilions
Chair: Ali Otlag
Bio-inspired Lamellar Structures
Waxman Yavari-Khah, Simon Schlücker
Robotic Constraints Informed Design Process
Thomas Carbone, Toshihiro Higash, Sven Stumm, Ethan Kerber, Sigrid Brell-Clasen
Inflatable Structures
Nicola Del Dinistris, Christoph Zechmeister, Salim Alatbi, Maximilian Kuhn, Mike Zeller, Ben Goody
Steeplying Geometry Wood Structures
Xinhong Ling, Jin-Woo Yang, Ilia Crade
Experimental Bicomposite Pavilion
Helen Daly, Priya Bapakhor, Jan Pink

2:30 - 4:00
Session 4 | Formworks
Chair: Jan Muy
Unprintable Forms
Ilias Akkermann, Zeinab Yousef-Ahmed, Frank Bos, Meinan Coldefy
Dissolvable 3D-Printed Formwork
Dudley Elizabeth Close, Zoe Linley Hunt
Dissolvable 3D-Print Formwork
Matthew Lavelle, Benjamin Oddenburger
Additive Coating of Mass-Customizable Bricks
Nina Giannopoulos, Stephen Horsfield, Chengyi Tu
FLATPACK
Abhig Bhair, Abhig Bhair, Sean Kavan

4:15 - 5:30
Project Session 1
Chair: Adam Marcus
Walking Assembly: Craneless 3D-Uf-Construction
Brandon Clifford, Liz Lister, Tyler Sanger, David Zimmers
Last House
Jian Lamers, Cynthia Garnett
NECITY Modular Assembly System
Katharina Korte
MUD: Frontiers / Zonkers Frontiers
Rosalie Riee, Virginia San Filippo

4:15 - 5:30
Project Session 2
Chair: Adam Marcus
Hypernatural Objects
Nicole Coates, Gabriel Eshel, Garrett Finemore, Nicholas Reuser, Quadeo Velt
Expanded Perceptions
Nancy Chen, Frank Wiederem
Flexible Form: Parameterizable Construction with Robots
Ezra Hog-Ring-Lo, Lexian Yang, Yi Ku
The Arcos Bridge: Collaborative Robotics for Large Scale Construction
R. Scott Mitchell, Diane Yao, Alex Westfall

Friday
9:00 - 10:30
Session 5 | Material Research
Chair: Marc Newson
POLYBRICK 2.0
Eda Begum Birol, Yao Lu, Ege Sekkin, Colby Johnson, David Moy, Yaseen Islam, Jenny Salien
INFRASDINIC
Bret Grenier, Miguel Escalera, Asher Chassidy, Alex Inari
Polybrick H2
White Zhang, Willian Chen, Jenny Salien
Towards the Ideal Design
Kemal Faruq, Tien Sheed, Aaron Spencer
Digital Fabrication of Combination Materials
Kate MacDonald, Kyle Schumann, Jonas Hauptman

10:45 - 12:15
Session 6 | Theory
Chair: Gabriel Esquivel
Digital Supplementation
Gian Carluccio
Surround Architectures in Second-Order Cybernetic Architecture
Jan Knippers
Do Robots Dream of Digital Sheep?
Vladimir Shamir
Busting the Bubble
Kazi Lome, Mathieu Ventour
The Organization of Activity
Benedetta Bindi

10:45 - 12:15
Session 7 | Environments
Chair: Ali Otlag
Thermochromic Articulations
Andrew Boucher
Thermal Reality Capture
Luke Gardner, Adam Cheesnix, Formed Mergers
Ateliers
Luke Gardner, Adam Cheesnix, Sabrina Naumovski, Zeyu Ren
Robotic Augmented Imaging (RAI)
Ebrahim Hosseini
Cyber-physical UAV Navigation and Operation
Abdul Salooju, Keith Kosianen, Samiolti Garvanian, Ando Fredman, Jean-Nicolas Alex Decker

2:30 - 4:00
Session 8 | GAN
Chair: Jan Muy
Experimental Elevations using GAN Networks
Avi Mikulich, Christopher Beckenham, Jefferson Eiger
Interdisciplinary AI
Stephen Dyer, Benjamin Eiler
GAN Losi
Kyle Stump
AN ANONYMITY COMPOSITION
Marian Lu, Longwei Cen, Hunter Sklenske
Imaginary Places
Markus de Canio, Sandra Aklesingen, Alexandre Carton

2:30 - 4:00
Session 9 | AR + Fabrication
Chair: Giovanni Dal
Interactive Facade Detail Design Reviews with the VR Source Box
Christopher Morena, Fabien Souche
Augmented Construction
Davide Gaspere
[BIENT]
Guilherme John, Andrew John Will, James Pizzuti
Augmented Craftsmanship
Experimental Applications of Virtual Reality in Design Education
Ando Michael, Philip Koehle

4:15 - 5:45
Session 10 | Robotic Timber
Chair: Urban Weinich
Stressed Skin Wood Surface Structures
Amalou Mayron, David Conze, Oliver David King
Autonomous Architectural Operations
Dimitri Venieridis
The Bugs Wood Pavilion
Martin Klug, Nickolò Zigliare, Abel Groenewolt, Oliver David King, Amin Mergens, Daniel Sonntag
Exploring Natural Wood
Amit Kleinman, Ansley Kozcaz-Kozcaz
Distributed Robotic Timber Construction
Stefan Loeb, Florian Weber, Dyce Wood, Oliver Bucklin, Amin Mergens

4:15 - 5:45
Session 11 | Parts
Chair: Matias del Campo
Blockleks
Amalou Mayron, Oliver Plu, Jingjie Bai, Daniel Kühler
Toward Discrete Architecture: Automation takes Command
Robert Zimmer
Discrete vs. Discretized Growth
Diplomarch Unter, Igor Hanc, Andrei Gromov
Mathematical Modelling of Cities as Complex Systems
All Kossach, Michael Bresecker
Design for Multi-Customization
Kai Ma, Denis Martin, Churfing Ju, Philip F. Yang

Saturday
9:00 - 10:30
Session 12 | Alternative Printing + Casting
Chair: Jing Xu
Journey Printing
Zack Schlitt, Laura Yeh,Manh, Sebastian Albadal, Jose Luis Garcia del Castillo y Lopez, Merlin Bechtold
Silk 3D Printing
Nicola Wit денежг, Taloine Danne
Vertical Mutations
Alain Angelou, Angela Yin, Patricia Bedard, Less Reiser, Timothy Wedding, Benjamin Dillerburger
Self-Choreographing Networks
Sandrine Sebille, Maryaboussa, Sabih Suzi Ennora, Axel Klümm, Jean Kippen, Amin Mergens
Alice
David Kochsich, Andrehe Tabei, Sosnali Garvan, Arno Timmermans, Angeline Chrisit, David Andre Lein, Reinhold Kneuerer
IRREDESCENCE Bio-inspired Energetic Matter
Bethan Fardel

2:30 - 3:00
Special Paper Session | Autodesk Emergent Research Award
Chair: Katty Yellow
Ellena Basini
Batdan Beyer, Daniel Suarez