



Sunday	PRE-WORKSHOP		
March 13	Computer Lab 262, Faculty of Architecture, Design and Planning, 148 City Road, University of Sydney		
14:00–17:00	PRE-WORKSHOP <i>Grasshopper Introductory Course</i>		Computer Lab 262, Faculty of Architecture, Design and Planning, 148 City Road, University of Sydney
Monday	INDUSTRY WORKSHOPS		
March 14	Pier 2/3, 13 Hickson Road, Walsh Bay (except Delcam PowerMill)		
09:00–10:00	REGISTRATION / COFFEE		
10:00–17:00	INDUSTRY WORKSHOPS <i>KUKA Robotics and the Association for Robots in Architecture, KUKA, ABB, Delcam PowerMill¹</i>		¹ DMaF Lab 154, Faculty of Architecture, Design and Planning, 148 City Road, University of Sydney
Tuesday	WORKSHOP DAY 1		
March 15	Pier 2/3, 13 Hickson Road, Walsh Bay		
09:00–10:00	REGISTRATION / COFFEE		
10:00–17:00	WORKSHOPS		
18:00–22:00	<i>Suggested Meeting Point: Opera Bar, Sydney Opera House, East Circular Quay</i>	http://operabar.com.au/	Lower Concourse, Sydney Opera House, Macquarie St, Sydney NSW 2000
Wednesday	WORKSHOP DAY 2		
March 16	Pier 2/3, 13 Hickson Road, Walsh Bay		
10:00–17:00	WORKSHOPS		
18:00–22:00	<i>Suggested Meeting Point: Theatre Bar At The End of the Wharf, Pier 4/5, Walsh Bay</i>	https://www.sydneytheatre.com.au/your-visit/the-theatre-bar-at-the-end-of-the-wharf	Pier 4/5, Hickson Road, Walsh Bay NSW 2000
Thursday	WORKSHOP DAY 3		
March 17	Pier 2/3, 13 Hickson Road, Walsh Bay		
10:00–17:00	WORKSHOPS		
18:00–22:00	<i>BBQ² at University of Sydney and Optional Special Event³: Huang Yi and KUKA Performance at Seymour Centre Sydney</i>	² BBQ @ Faculty of Architecture, Design and Planning, 148 City Road, University of Sydney	³ To book for Huang Yi and KUKA performance, please see the Special Event listing on the schedule page on Rob Arch 2016 website .
Friday	CONFERENCE DAY 1		
March 18	Pier 2/3, 13 Hickson Road, Walsh Bay		
08:30–09:10	REGISTRATION / COFFEE		
09:10–09:25	CONFERENCE DAY 1 WELCOME		
	Welcome from Conference Chairs: Dagmar Reinhardt, Rob Saunders, Marjo Niemelä and Jane Burry	<i>University of Sydney and RMIT</i>	
09.25–10.45	SESSION 1: FULL PAPERS		
09:30–09:50	Michael Jeffers	<i>Carnegie Mellon University</i>	Autonomous Robotic Assembly with Variable Material Properties
09:50–10:10	Paul Nicholas, David Stasiuk, Esben Nørgaard, Christopher Hutchinson and Mette Ramsgaard Thomsen	<i>Royal Danish Academy of Fine Arts, Monash University and Royal Danish Academy of Fine Arts</i>	An Integrated Modelling and Toolpathing Approach for a Frameless Stressed Skin Structure
10:10–10:30	Ammar Mirjan, Federico Augugliaro, Raffaello D'Andrea, Fabio Gramazio and Matthias Kohler	<i>ETH Zürich</i>	Building a Bridge with Flying Robots
10.50–11.10	MORNING TEA BREAK		
11.10–11.40	INDUSTRY KEYNOTE		
11:15–11:40	Frank-Peter Kirgis, Peter Katsos and Martin Kohlmaier (intro by Robots in Architecture)	<i>ABB Switzerland</i>	Collaborative Robotics
11.40–13.00	SESSION 2: PROJECT PAPERS		
11:45–12:00	Nicholas Williams and John Cherrey	<i>RMIT University</i>	Crafting Robustness: Rapidly Fabricating Ruled Surface Acoustic Panels
12:00–12:15	Simon Weir, Dion Moulton and Shayani Fernando	<i>University of Sydney</i>	Stereotomy of Wave Jointed Blocks : Toward a Wave-Jointed Stone Construction using Wire Cutter Toolpath Generation
12:15–12:30	Christopher Robeller and Yves Weinand	<i>EPFL Lausanne</i>	Fabrication-Aware Design of Timber Folded Plate Shells with Double-Through Tenon Joints
12:30–12:45	Alexander Jung, Dagmar Reinhardt and Rod Watt	<i>University of Sydney</i>	RBDM_Robodome: Complex Curved Geometries with Robotically Fabricated Joints
13.00–13:45	LUNCH <i>Lunch provided & cafes in vicinity</i>		
13.45–14:15	INDUSTRY KEYNOTE		
13:50–14:15	Matt Jczyk and Charles Jones	<i>Autodesk, Delcam</i>	Design Computation, Optimization and Fabrication
14:15–15:35	SESSION 3: FULL PAPERS		
14:20–14:40	Andrew Saunders and Greg Epps	<i>University of Pennsylvania and RoboFold Ltd</i>	Robotic Lattice Smock: A Method for Transposing Pliable Textile Smocking Techniques through Robotic Curved Folding and Bending of Sheet Metal
14:40–15:00	Philip F. Yuan, Hao Meng, Lei Yu and Liming Zhang	<i>Tongji University, Archi-Union Architects and Qing Hua University</i>	Robotic Multi-Dimensional Printing Based on Structural Performance
15:00–15:20	Ron Culver, Joseph Sarafian and Julia Koerner	<i>UCLA</i>	Fabric Forms: Robotic Positioning of Fabric Formwork
15:35–16:00	AFTERNOON TEA		
16:00–17:20	SESSION 4: PROJECT PAPERS		
16:05–16:20	Marjo Niemelä, Dylan Wozniak-O'Connor, Samantha Horlyck, Gabriele Ulacco, Rod Watt and Rob Saunders	<i>University of Sydney</i>	BotBar: A Platform for Multi-Disciplinary Design Education
16:20–16:35	Roland Snooks and Gwyllim Jahn	<i>RMIT University, Kukkugia, Studio Roland Snooks and Elseware Collective</i>	Closeness: On the Relationship of Multi-Agent Algorithms and Robotic Fabrication
16:35–16:50	Kaicong Wu and Axel Kilian	<i>Princeton University</i>	Developing Architectural Geometry through Robotic Assembly and Material Sensing
16:50–17:05	Asbjørn Søndergaard, Oded Amir, Phillip Eversmann, Luka Piskorec, Florin Stan, Fabio Gramazio and Matthias Kohler	<i>Aarhus School of Architecture, Israel Institute of Technology & ETH Zürich</i>	Topology Optimization and Robotic Fabrication of Advanced Timber Space-Frame Structures
17:20–18:15	RIA PRIZE WINNERS		
18:15–18:30	CONFERENCE DAY 1 WRAP UP		
18:30–21:00	WORKSHOP EXHIBITION OPENING <i>Food trucks and/or Theatre Bar at the End of Wharf, Pier 4/5</i>		
Saturday	CONFERENCE DAY 2		

March 19 Pier 2/3, 13 Hickson Road, Walsh Bay		
08:30–09:00 REGISTRATION / COFFEE		
09:00–09:15 CONFERENCE DAY 12 WELCOME	<i>University of Sydney and RMIT</i>	Welcome from Conference Chairs: Dagmar Reinhardt, Rob Saunders, Marjo Niemelä and Jane Burry
09:15–09:55 KEYNOTE		
09:20–09:55 Francois Roche	<i>Lab M4 (mindmachinemakingmyth)</i>	'Psychaestenia Psycho-case Studies by New Territories/M4
09:55–11:10 SESSION 5: FULL PAPERS		
10:00–10:20 Gregor Steinhausen, Johannes Braumann, Jan Brüninghaus, Matthias Neuhaus, Sigrid Brell-Cokcan and Bernd Kuhlenkötter	<i>TU Dortmund, Association for Robots in Architecture, University for Arts and Design Linz, RWTH Aachen University, Ruhr-Universität Bochum</i>	Path Planning for Robotic Artistic Stone Surface Production
10:20–10:40 Dagmar Reinhardt, Densil Cabrera, Alexander Jung and Rod Watt.	<i>The University of Sydney</i>	Towards a Micro Design of Acoustic Surfaces
10:40–11:00 Asbjørn Søndergaard, Jelle Feringa, Toke Nørbjerg, Kasper Steenstrup, David Brander, Jens Gravesen, Steen Markvorsen, Andreas Bærentzen, Kiril Petkov, Jesper Hattel, Kenn Clausen, Kasper Jensen, Lars Knudsen and Jacob Kortbek	<i>Odico Formwork Robotics Aps, Technical University of Denmark, GXN A/S, Danish Technological Institute</i>	Robotic Hot-Blade Cutting: An Industrial Approach to Cost-Effective Production of Double Curved Concrete Structures
11:10–11:30 MORNING TEA BREAK		
11:30–12:00 INDUSTRY KEYNOTE		
11:35–12:00 Heinrich Munz	<i>KUKA Roboter GmbH</i>	A New Approach to Simple Software Integration of Robots in Production Machinery, Automation Systems, and New Parametric Environments
12:00–13:15 SESSION 6: PROJECT PAPERS		
12:05–12:20 Kathrin Doerfler, Timothy Sandy, Markus Gifftaler, Fabio Gramazio, Matthias Kohler and Jonas Buchli	<i>ETH Zürich</i>	Mobile Robotic Brickwork : Automation of a Discrete Robotic Fabrication Process Using an Autonomous Mobile Robot
12:20–12:35 Jose Pedro Sousa, Cristina Gassó Palop, Eduardo Moreira, Andry Maykol Pinto, José Lima, Paulo Costa, Pedro Costa, Germano Veiga and A. Paulo Moreira	<i>University of Porto, CEAU/DF, INESC TEC, Polytechnic Institute of Bragança,</i>	The SPIDERobot: A Cable-Robot System for On-Site Construction in Architecture
12:35–12:50 Joshua Bard, Richard Tursky and Michael Jeffers	<i>Carnegie Mellon University</i>	RECONstruction: A Survey of Surface Scanning Techniques for Architectural Substrates in Robotic Assembly
12:50–13:05 Nathan King, Nathan Melenbrink, Nick Cote and Gustav Fagerström	<i>Virginia Tech, The United Nathans and Autodesk</i>	BUILD-ing the MASS Lo-Fab Pavilion : Dynamo-Driven Collaborative Robotic Fabrication Workflows for the Construction of Spatial Structures
13:15–14:00 LUNCH		
14:00–15:30 SESSION 7: PROJECT PAPERS		
14:05–14:20 Felix Amtsberg, Gernot Parmann, Andreas Trummer and Stefan Peters	<i>Graz University of Technology</i>	From Analysis to Production and Back : Attempts and Results of Reusable Adaptive Freeform Production Strategies for Double Curved Concrete Construction Elements
14:20–14:35 Kate Dunn, Dylan Wozniak O'Connor, Marjo Niemelä and Gabriele Ulacco	<i>University of NSW, The University of Sydney and AR-MA</i>	Free Form Clay Deposition in Custom Generated Molds
14:35–14:50 Brian Peters	<i>Kent State University and Design Lab Workshop</i>	Solar Bytes Pavilion: 3D Printed Interlocking Modules
14:50–15:05 Sina Mostafavi and Henriette Bier	<i>TU Delft</i>	Materially Informed Design to Robotic Production : A Robotic 3D Printing System for Informed Material Deposition
15:05–15:20 Kam-Ming Mark Tam, James R. Coleman, Nicholas W. Fine and Caitlin T. Mueller	<i>Massachusetts Institute of Technology</i>	Robotics-Enabled Stress Line Additive Manufacturing
15:30–15:50 AFTERNOON TEA BREAK		
15:50–17:35 SESSION 8: WORKSHOP PAPERS/ Workshops		
15:55–16:10 Curime Batliner, Michael Jake Newsum and M. Casey Rehm	<i>Southern California Institute of Architecture (SCI-Arc)</i>	Robot UI: User Interfaces for Robotic Live Control
16:10–16:25 Thibault Schwartz, Sebastian Andraos, Jonathan Nelson, Chris Knapp and Bertrand Arnold	<i>HAL Robotics, Bond University and Soundisplay</i>	Towards On-site Collaborative Robotics: Voice Control, Co-Speech Gesture & Context-Specific Object Recognition via Ad-Hoc Communication
16:25–16:40 Roland Snooks and Gwylim Jahm	<i>RMIT University, Kokkugia, Studio Roland Snooks and Elseware Collective</i>	Stigmatic Accretion
16:40–16:55 Alex Dubor, Dagmar Reinhardt, Kate Dunn, Rob Saunders, Dylan Wozniak O'Connor, Marjo Niemelä, Susana Alarcon Licona and Samantha Horlyck with Martin Bechthold	<i>Institute for Advanced Architecture of Catalonia (IAAC), The University of Sydney, University of NSW and Harvard</i>	Sensors and Workflow Evolutions: Developing A Framework for Instant Robotic Toolpath Revision
16:55–17:10 Dave Pigram, Iain Maxwell and Wes McGee	<i>University of Technology Sydney and University of Michigan</i>	Towards Real-Time Adaptive Fabrication-Aware Form Finding in Architecture
17:10–17:25 Tim Schork, Jackson Caish-Sadlek, Jon McCormack, Achim Menges, Oliver Krieg, Tobias Schwinn	<i>MADA Monash University and ICD Stuttgart</i>	Robotic Sewing of Custom Timber Modules
17:40–18.30 KEYNOTE		
17:45–18:30 Mark Burry	<i>University of Melbourne</i>	Robots at the Sagrada Família Basilica
18:30–18:55 CONFERENCE CLOSING WORDS		
Dagmar Reinhardt, Rob Saunders, Marjo Niemelä and Jane Burry	<i>University of Sydney and RMIT</i>	
19:00 CONFERENCE CLOSING DINNER, HARBOUR CRUISE & AWARD CEREMONY		
Alois Buchstab	<i>KUKA Robot Group</i>	KUKA Young Potential Award Presentation
Frank-Peter Kirgis	<i>ABB</i>	ABB Mobility Award Presentation
Ninotschka Titchkosky	<i>BVN</i>	Best Workshop Award
		Other awards to be announced

Sunday SYDNEY OPERA HOUSE TOUR

March 20

10:45–12:00 Optional Special Event : Opera House Tour *To Book for the Opera House Tour see Special Event listing under Schedule Page on Rob|Arch 2016 website.*