**Conference Program**

### Sunday

**March 13**
- **PRE WORKSHOP**
  - 14:00-17:00
  - Grasshopper Introductory Course
  - Computer Lab 262, Faculty of Architecture, Design and Planning, 148 City Road, University of Sydney

### Monday

**INDUSTRY WORKSHOPS**
- **March 14**
  - 09:00-10:00
    - REGISTRATION / COFFEE
  - 10:00-17:00
    - INDUSTRY WORKSHOPS
      - KUKA Robotics and the Association for Robots in Architecture, KUKA, ABB, Delcam PowerMill
      - DML Lab 154, Faculty of Architecture, Design and Planning, 148 City Road, University of Sydney

**WORKSHOP DAY 1**
- **March 15**
  - 18:00-22:00
    - Suggested Meeting Point: Opera Bar, Sydney Opera House, East Circular Quay
    - Lower Concourse, Sydney Opera House, Macquarie St, Sydney NSW 2000

### Tuesday

**WORKSHOP DAY 2**
- **March 16**
  - 18:00-22:00
    - Suggested Meeting Point: Theatre Bar At The End of the Wharf, Pier 4/5, Walsh Bay
    - Pier 4/5, Hickson Road, Walsh Bay NSW 2000

### Wednesday

**WORKSHOP DAY 3**
- **March 17**
  - 18:00-22:00
    - BBQ @ University of Sydney and Optional Special Event: Huang Yi and KUKA Performance at Seymour Centre Sydney
    - BBQ @ Faculty of Architecture, Design and Planning, 148 City Road, University of Sydney
    - To book for Huang Yi and KUKA performance, please see the Special Event listing on the schedule page on RobArch 2016 website.

### Thursday

**CONFERENCE DAY 1**
- **March 18**
  - 09:00-09:25
    - REGISTRATION / COFFEE
  - 09:10-09:25
    - CONFERENCE DAY 1 WELCOME
      - Welcome from Conference Chairs: Dagmar Reinhardt, Rob Saunders, Marjo Niemelä and Jane Burry
      - University of Sydney and RMIT

**SESSION 1: FULL PAPERS**
- 09:30-09:50
  - Michael Jeffers (Carnegie Mellon University)
  - Crafting Robustness: Rapidly Fabricating Ruled Surface Acoustic Panels

- 09:50-10:10
  - Paul Nicholas, David Stasiuk, Eben Nargaad, Christopher Hutchinson and Mette Ramsgaard Thomsen (Royal Danish Academy of Fine Arts, Monash University and Royal Danish Academy of Fine Arts)
  - 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 (ETH Zurich)
  - Building a Bridge with Flying Robots

**MEETING TEA BREAK**
- 10:50-11:10

**INDUSTRY KEYNOTE**
- 11:15-11:40
  - Frank-Peter Kirgis, Peter Katsos and Martin Kohlmaier (intro by Robots in Architecture)
  - ABB Switzerland
  - Collaborative Robotics

**SESSION 2: FULL PAPERS**
- 11:40-12:30
  - Nicholas Williams and John Cherrey (RMIT University)
  - Crafting Robustness: Rapidly Fabricating Ruled Surface Acoustic Panels

- 12:00-12:15
  - Simon Weir, Dion Moulit and Shayan Fernando (University of Sydney)
  - Stereotomy of Wave Jointed Blocks: Toward a Wave-Jointed Stone Construction using Wire-Cutter Toolpath Generation

- 12:15-12:30
  - Christopher Robeller and Ves Weinard (EPFL Lausanne)
  - Fabrication-Aware Design of Timber Folded Plate Shells with Double-Through Tenon Joints

- 12:30-12:45
  - Alexander Jung, Dagmar Reinhardt and Rod Watt (University of Sydney)
  - RBDM_Robodome: Complex Curved Geometries with Roboticallly Fabricated Joints

**LUNCH**
- 13:00-13:45
  - Lunch provided & cafes in vicinity

**INDUSTRY KEYNOTE**
- 13:45-14:15
  - Matt Jezzyk and Charles Jones (Autodesk, Delcam)
  - Design, Computation, Optimization and Fabrication

**SESSION 3: FULL PAPERS**
- 14:15-14:50
  - Andrew Saunders and Greg Epps (University of Pennsylvania and RoboFold Ltd)
  - Robotic Multi-Dimensional Printing Based on Structural Performance

- 14:40-15:00
  - Philip F. Yuan, Hao Meng, Lei Yu and Liming Zhang (Tongji University, ArchiUnion Architects and Qing Hua University)
  - Robotic Lattice Smock: A Method for Transposing Pliable Textile Smocking Techniques through Robotic Curved Folding and Bending of Sheet Metal

**AFTERNOON TEA**
- 15:00-15:20
  - Ron Culver, Joseph Sarafian and Julia Koerner (UCLA)
  - Fabric Forms: Robotic Positioning of Fabric Formwork

**SESSION 4: PROJECT PAPERS**
- 15:35-16:00
  - Marjo Niemelä, Dylan Wooniak-O'Connor, Samantha Hotlyck, Gabriele Ulacco, Rod Watt and Rob Saunders (University of Sydney)
  - BotBar: A Platform for Multi-Disciplinary Design Education

- 16:00-16:20
  - Roland Snooks and Gwilym Jahn (RMIT University, Kokkugia, Studio Roland Snoocks and Elseware Collective)
  - Robotic Fabrication: A Method for Transposing Pliable Textile Smocking Techniques through Robotic Curved Folding and Bending of Sheet Metal

- 16:20-16:35
  - Roland Snooks and Gwilym Jahn (RMIT University, Kokkugia, Studio Roland Snoocks and Elseware Collective)
  - Closeness: On the Relationship of Multi-Agent Algorithms and Robotic Fabrication

**SESSION 5: PROJECT PAPERS**
- 16:35-17:05
  - Kaicong Wu and Axel Kilian (Princeton University)
  - Developing Architectural Geometry through Robotic Assembly and Material Sensing

**AFTERNOON TEA**
- 17:00-17:20
  - Adjourn Sددndegaard, Dided Amir, Philip Eversmann, Luka Piskorec, Florin Stan, Fabio Gramazio and Matthias Kohler (Aarhus School of Architecture, Israel Institute of Technology & ETH Zurich)
  - Topology Optimization and Robotic Fabrication of Advanced Timber Space-Frame Structures

**RRIA PRIZE WINNERS**
- 18:15-18:30
  - CONFERENCE DAY 1 WRAP UP

**WORKSHOP EXHIBITION OPENING**
- 18:30-19:00
  - Food trucks and/or Theatre Bar at the End of the Wharf, Pier 4/5

### Saturday

**CONFERENCE DAY 2**
Sunday March 20

SYDNEY OPERA HOUSE TOUR

To Book for the Opera House Tour see Special Event listing under Schedule Page on Rob/Arch 2016 website.