

# CAADRIA 2018 CALL FOR PAPERS

The 23rd International Conference on  
Computer-Aided Architectural Design Research in Asia

**16-19 May 2018**

Tsinghua University, Beijing, China  
Tsinghua School of Architecture & DADA

<http://www.caadria2018.org>

## **1. Conference Theme: Learning, Prototyping and Adapting**

Rapidly evolving technologies are increasingly shaping our societies as well as our understanding of the discipline of architecture. Computational developments in fields such as machine learning and data mining enable the creation of learning networks that involve architects alongside algorithms in developing new understanding. Such networks are increasingly able to observe current social conditions, plan, decide, act on changing scenarios, learn from the consequences of their actions, and recognize patterns out of complex activity networks. While digital technologies have already enabled architecture to transcend static physical boxes, new challenges of the present and visions for the future continue to call for both innovative responses integrating emerging technologies into experimental architectural practice and their critical reflection. In this process, the capability of adapting to complex social and environmental challenges through learning, prototyping and verifying solution proposals in the context of rapidly shifting realities has become a core challenge to the architecture discipline.

Supported by advancing technologies, architects and researchers are creating new frameworks for digital workflows that engage with new challenges in a variety of ways. Learning networks that recognize patterns from massive data, rapid prototyping systems that flexibly iterate innovative physical solutions, and adaptive design methods all contribute to a flexible and networked digital architecture that is able to learn from both past and present to evolve towards a promising vision of the future.

## **2. Call for Paper**

CAADRIA 2018 invites original high quality papers and posters presenting current computer-aided architectural design research in a general sense, accommodating a broad spectrum of approaches ranging from speculative, informal investigations to conventional scientific research, including but not limited to the following topics:

- Computational design research and education
- Computational design analysis

- Generative, algorithmic and evolutionary design
- Digital fabrication and construction
- Collaborative, collective and participative design
- Design cognition
- Virtual/augmented reality and interactive environments
- Virtual architecture and city modeling
- Human-computer interaction
- Ubiquitous and mobile computing
- Practice-based and interdisciplinary computational design research
- Theory, philosophy and methodology of computational design research
- Simulation and visualization
- Building Information Modeling
- AI for design and built environments
- IoT for built environments
- Smart cities and smart buildings

Paper acceptance will be subject to a two-stage reviewing process, consisting of an initial abstract review and a later double-blind peer review of full-length manuscripts. Paper publication will be subject to review acceptance, to compliance with submission deadlines and formatting guidelines, and to payment of the conference registration fee.

Besides the above specific theme, CAADRIA 2018 also invites posters on digital architectural design works that have been constructed, and short papers on general topics in computational design research. Young researchers currently involved in postgraduate studies are invited to submit their work-in-progress research papers to the Postgraduate Student Consortium.

### 3. IMPORTANT DATES

#### 1) FULL PAPERS

Abstract Submission	30th September 2017
Notification of Abstract Acceptance	30th October 2017
Full Paper Submission	20th December 2017
Notification of Full Paper Acceptance	29th January 2018
Final Camera Ready Full Paper Submission	25th February 2018
Abstract and Full Paper Submission	<a href="http://caadria.org/proceedings/">http://caadria.org/proceedings/</a>

#### 2) YOUNG CAADRIA AWARD

Young CAADRIA Award Submission of Letter of Application and CV	3rd February 2018
Notification of Young CAADRIA Award Acceptance	19th February 2018
Submission to	<a href="http://caadria.org/proceedings/">http://caadria.org/proceedings/</a>

### **3) SASADA AWARD**

Sasada Award Nomination 30th November 2017  
Notification of Acceptance 1th February 2018  
Submission to [sasada@caadria.org](mailto:sasada@caadria.org)

### **4) POSTGRADUATE STUDENT CONSORTIUM**

For young researchers currently involved in postgraduate studies.

Postgraduate Student Consortium  
Submission 31st March 2018  
Submission of work-in-progress research papers to [pgsc@caadria-review.org](mailto:pgsc@caadria-review.org)

### **5) POSTERS AND SHORT PAPERS**

Poster and Short Paper Submission 12th February 2018  
Notification of Poster and Short Paper Acceptance 4th March 2018  
Poster and Short Paper Submission [caadria2018@126.com](mailto:caadria2018@126.com)

### **6) PRE-CONFERENCE WORKSHOPS**

Workshop Proposal Submission 15th January 2018  
Notification of Workshop Proposal Acceptance 31st January 2018  
Call for Workshop Participants 1st February 2018  
Workshop Proposal Submission [caadria2018@126.com](mailto:caadria2018@126.com)

### **7) CONFERENCE**

Conference website [www.caadria2018.org](http://www.caadria2018.org)  
Contact conference organizer [caadria2018@126.com](mailto:caadria2018@126.com)

## **4. Committees**

#### **1) CAADRIA 2018 Paper Selection Committee**

Tomohiro Fukuda, Chair (Japan)  
Weixin Huang (China)  
Patrick Janssen (Singapore)  
Sawako Kaijima (Singapore)  
Kristof Crolla (Hong Kong)  
Submission inquiries: [psc@caadria-review.org](mailto:psc@caadria-review.org)

#### **2) CAADRIA 2018 Short Paper Selection Committee**

Weixin Huang, Chair (China)

Mani Williams (Australia)

Dan Luo (China)

YiXin Wu (Taiwan)

Submission inquiries

[caadria2018@126.com](mailto:caadria2018@126.com)

3) CAADRIA 2018 Postgraduate Student Consortium Committee

Dagmar Reinhardt, Chair (Australia)

Submission inquiries

[pgsc@caadria-review.org](mailto:pgsc@caadria-review.org)

4) CAADRIA 2018 Organizing Committee

Weiguo Xu (Chair)

Weixin Huang

Yuguang Liu

Yufang Zhou

Feng Xu

Lei Yu

Contact

[caadria2018@126.com](mailto:caadria2018@126.com)

**5. Official Website**

CAADRIA 2018

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<http://www.caadria2018.org>

[http:// www.caadria.org](http://www.caadria.org)

**CAADRIA 2018 Organizing Committee**