

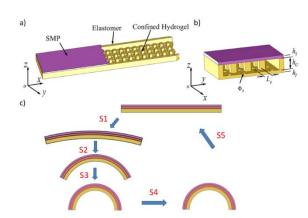
# **ASD Discovery**

We SHARE to inspire and ignite ideas for **Architecture & Sustainable Design (ASD)** pillar!

The titles featured here are to give you a peek into the wealth of resources we have. We hope, through this will encourage you to explore and read further. Share with us topics of importance to ASD and we can introduce relevant titles from some <u>600,000 eBooks</u> we carry.

June 2016

#### **FACULTY WORK**



## 3D Printed Reversible Shape Changing Components with Stimuli Responsive Materials

By Yuan Chao, ASD

In this paper, the authors presented a new reversible shape-changing component design concept, utilizing the expansion of a hydrogel to vary shapes and the temperature-based parameter of a shape memory polymer to manage the time of such shape change. The proposed model was proved to be useful to a number of engineering and biomedical applications.

Source: Scientific Reports (April 2016)



### SUTD Professors Design 3D Printed Mesh Pavilion

By Prof Felix Raspall and Prof Carlos Bañón, ASD

A 14.5-meter-long mesh pavilion was set up at the Campus Centre of SUTD Singapore for the university's Open House 2016. The model contains 19 metal and 72 nylon 3D printed nodes connected to each other by aluminum bars, manifesting the application of 3D printing technology to functional architectural components at a large scale.

Source: ArchDaily (June 2016)

## ARCHITECTURE CAREER



## Two Qualities You Need to Succeed in an Architecture Career

By Brandon Hubbard

According to a survey of 104 CEOs on the most important qualities of an ideal employee, two qualities outperformed the rest and gained the votes from 86% of the senior executives:

- 1. Do what is important first.
- 2. Get the job done fast.

Source: The Architect's Guide

## ART & ARCHITECTURE



## Student Proposal for London's Bishopsgate Goodsyard Builds on the Legacy of Zaha Hadid

By Patrick Lynch

The student team adopted biomimicry and sculptural design to produce a blueprint of a high-density complex, proposing for London's Bishopsgate Goodsyard. The project is both inspired by and contributing to Zaha Hadid's ongoing legacy.

Source: <u>ArchDaily</u> (May 2016)



### Façade Panels - Flatlock Tiles

By using various sized flat tiles and manipulating the overlapping seams, the flatlock panel system can have a flexible layout along the façade or roof structure, being ideal for curvilinear surfaces.

Source: 100 Top Projects

#### PROFESSIONAL ARCHITECTURE

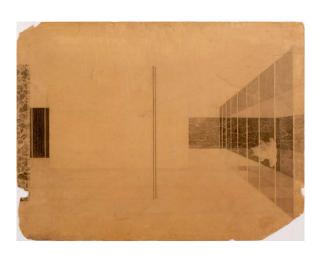


### The Use of Digital Fabrication as a Sketching Tool in the Architectural **Design Process - A Case Study**

By Asli Agirbas

In this project, computer-aided manufacturing (CAM) techniques are utilized as a sketching tool for developing ideas in the architectural design process; unlike in real cases students merely use the technologies upon finishing their works. Digital fabrication is concluded to be an integral part of design activities.

Source: <u>eCAADe</u> (2015)



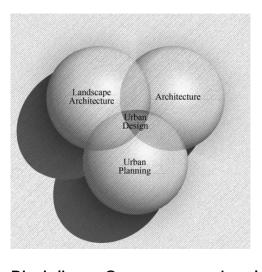
## Drawing the Barcelona Pavilion: Mies van der Rohe and the Implications of Perspectival Space

By Desley Luscombe

The article studies a drawing of the interior of the German State Pavilion in Barcelona designed by Ludwig Mies van der Rohe in 1929 and presents two forms of investigations, one focusing on the facture of the work and the other engaging a historical perspective.

<u>View</u> the whole publication, The Journal of Architecture.

Source: The Journal of Architecture (Mar 2016)



## Disciplinary Convergence: Landscape Architecture and the Spatial Design **Disciplines**

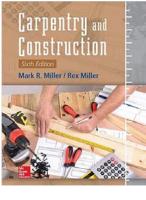
By Karl Kullmann

The author considers the concern for the viability of landscape architecture as a result of the shifts among the spatial design disciplines. A discussion on the contested crossdisciplinary interaction, focusing on architecture and landscape architecture, is presented using case studies. The findings are potentially significant to disciplinary education and practice.

<u>View</u> the whole publication, Journal of Landscape Architecture.

Source: <u>Journal of Landscape Architecture</u> (Feb 2016)

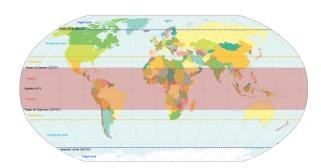
## BOOKS



**Carpentry and Construction** 

By Mark R. Miller and Rex Miller A reader-friendly DIY guide gets you through the whole course of home construction from remodelling to household repairing. It also captures the latest tools and materials, practices on environmentally friendly construction, and a newly added chapter on painting. The book is logically organized, featuring over 1,500 up-to-date images as well as clear technique demonstrations.

Source: Access Engineering



## Planning to Cope with Tropical and Subtropical Climate Change

By Maurizio Tiepolo

This book covers a broad range of topics in coping with climate change in tropical and subtropical areas, including climate planning, early warning systems, monitoring systems etc. The author also provided a number of examples of climate change characterizations, as well as decision making tools that can be used by operators or researchers to conduct adaptation planning.

Source: <u>De Gruyter Online</u>

For more inspiring articles or in-depth research, contact us at <a href="mailto:library@sutd.edu.sg">library@sutd.edu.sg</a>!

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