



School of Mechanical and Aerospace Engineering

## 2014 SINGAPORE INTERNATIONAL 3D PRINTING COMPETITIONS TOP PRIZE WINNERS



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# 2014 SINGAPORE INTERNATIONAL 3D Printing Competitions



TOP PRIZE WINNER



OPEN CATEGORY

School of Mechanical and Aerospace Engineering

## Orchid-Spirit

*By De-Yau Lin (Team), Taiwan*

The Orchid Floral Hair Pin is featured with elegant gold 3D printed petals and delicate pin with silver tincture. The rigid pin can be transformed, and can be worn as a Bracelet. The buds contain the oil, spread the fragrance slowly.

**Technique:** SLM (Ti-6Al-4V)



TOP PRIZE WINNER



TERTIARY CATEGORY

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## Inflorescence of Orchids

*By Nor 'Atikah Binte Zainal (Team),  
Republic Polytechnic*

The Jewel set was inspired by Vanda Miss Joaquim. With the combination of diamonds and orchid, this design intent to remind every Singaporean of the efforts of our forefathers to develop us from a small fishing village to a shining star and at the same time one of the most visited Garden City in Asia.

**Technique:** Polyjet (using VeroGray, Fullcure 850)

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SCHOOL CATEGORY



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## Frosom

*By Jia Deqian & Xi Xiaodong,  
River Valley High School*

Frosom is comprised of three hairpins, with one comb-shaped hairpin and one pair of long-needle pins. Two long-needle hairpins form stark contrast with each other, yet unified by the grand theme of orchid flower as the focal point.

**Technique:** FDM (ABS)



TOP PRIZE WINNER



OPEN CATEGORY



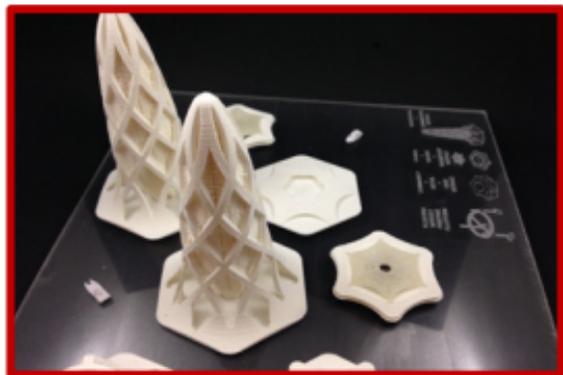
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## Venice of the South East

*By Lim Kae Woei (XYZ Workshop),  
Australia*

Venice of the South East is a series of modular floating platforms that are inter-connected like a living ecosystem. Each floating platform is to house various programmatic functions needed for an entire community to function.

**Technique:** FDM (PLA)



TOP PRIZE WINNER

TERTIARY CATEGORY



NANYANG  
TECHNOLOGICAL  
UNIVERSITY

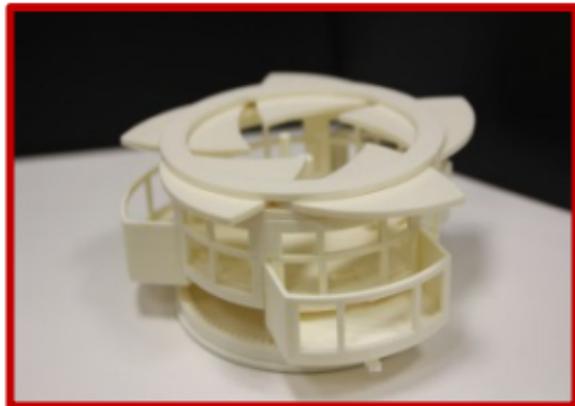
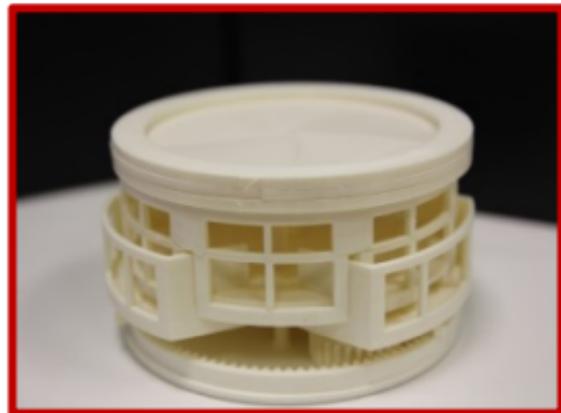
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## Morphling

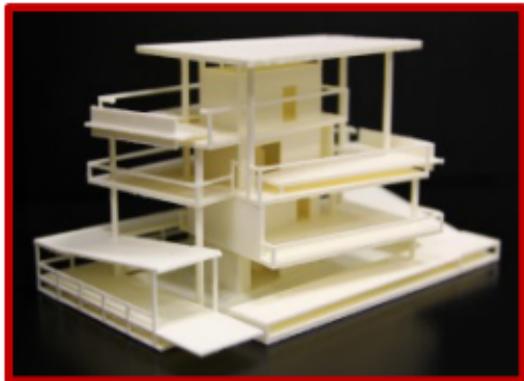
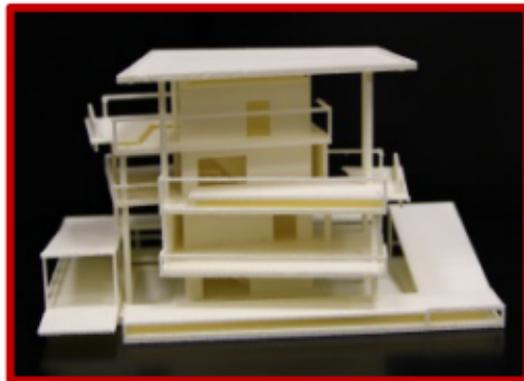
*By Cheung See Lin (Team),  
NTU MAE-CEE*

The expandable platform serves as additional space which can be retracted when not in service which reflects the dynamic space requirements of the individual at each stages of the day.

**Technique:** FDM (ABS plus)



TOP PRIZE WINNER



SCHOOL CATEGORY



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## Castle in the Air

*By Lu Zhen,  
Hwa Chong Institution*

Castle in the Air, a connecting block between high rise buildings, is created for office workers to relax and it also provides an excellent environment for them to communicate and chat with one another.

**Technique:** FDM (ABS)