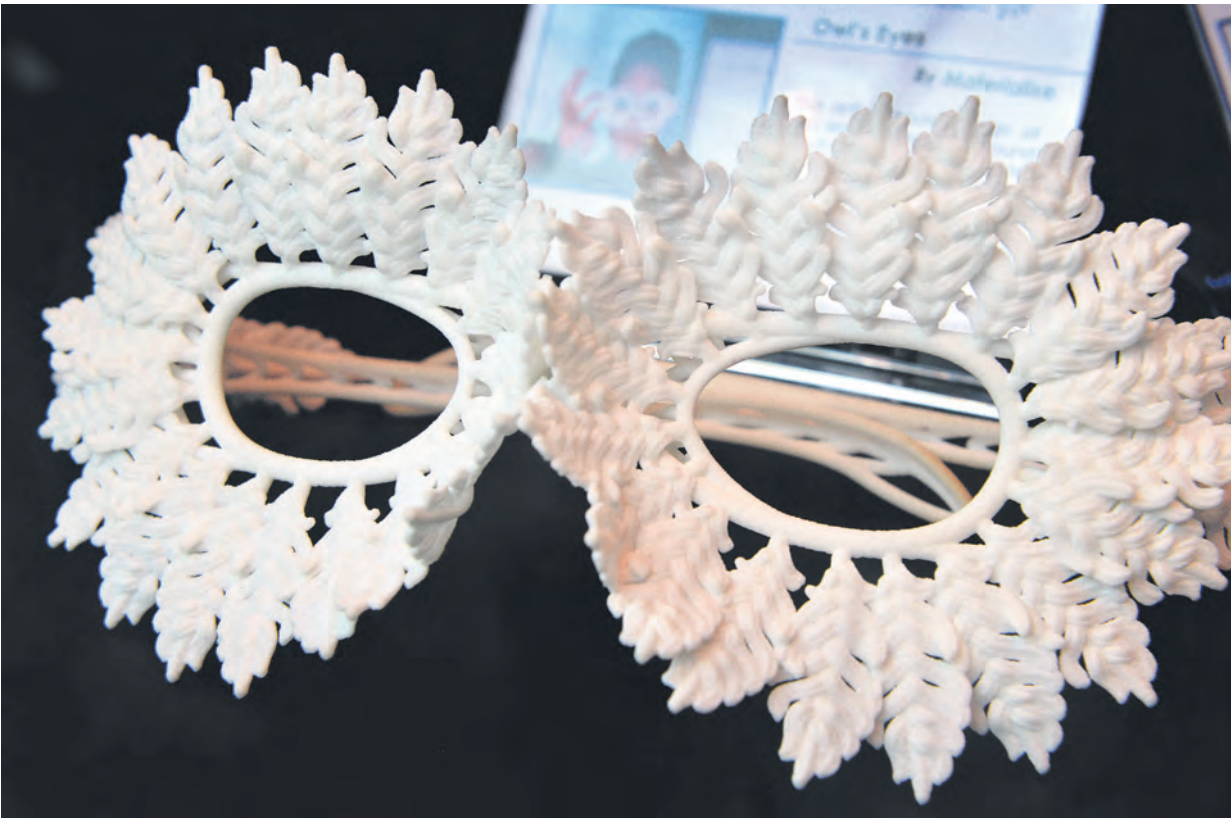


BY THE  
NUMBERS

\$10,000

The top cash prize of the two festival categories — wearable fashion and abacus design. A duo from Australia won the first category, and a team from China emerged winners of the latter.



STYLE: (From far left) Two designs by award-winning Malaysian designer Melissa Looi, and a pair of 3-D printed glasses on display at the festival.

TNP PHOTOS: JEREMY LONG

# Fashionable prints

Printed designs take the stage at 3-D Printing Festival organised by NTU

Report by JASMINE LIM  
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Intricate designs and elaborate bodices took centre stage on the catwalk on Tuesday.

But here's the thing: Student engineers helped create them.

The designs were part of Singapore's first 3-D Printing Festival organised by Nanyang Technological University (NTU).

3-D printing is the process of creating a physical object from a 3-D digital model. Events included two international competitions, one on wearable fashion and the other on abacus design.

Aside from NTU teams from mechanical and aerospace engineering, and art, media and design, participants came from Australia, the US, China and Vietnam.

The winners of the wearable fashion category were Mr Lim Kae Woei and Ms Elena Low from xyz workshop in Australia. They walked away with \$10,000.

Their Chinese cheongsam-inspired piece was made of 26 sections and took 160 hours to print. They used their own 3-D printer, which had a limit on the dimensions it could print.

The pair then had to think of ways to segment it before piecing it together.

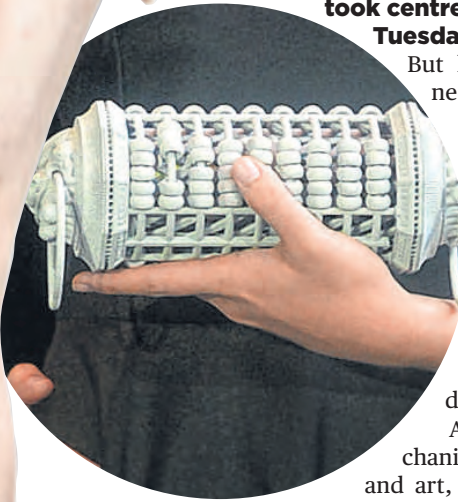
Even though they got into 3-D printing in May, the design took them just a month to complete.

"I've always had an interest in fashion, but with 3-D printing, I wanted to see how we could take it to the next level and incorporate that technology into a wearable piece," said Ms Low, 33.

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— Ms Elena Low (right), 33, from xyz workshop in Australia. She and partner Lim Kae Woei (far right) won the wearable fashion category with their cheongsam-inspired piece.



ART: (Left) The NTU team's winning design. (Above) A 3-D printed abacus.



## NTU TEAM WINS COMMENDATION

A seven-member team from NTU won the \$3,000 3-D fashion commendation prize in the same category.

Team leader and engineering student Tan Yu Jun, 23, said their inspiration for the piece came from the word "water" in Chinese calligraphy and echoed the fluidity of water.

One of the challenges they faced was the constraints of plastic, which was the material used.

The team, who did this outside of their school work, racked their brains to come up with a way to make the dress flow like water.

For three months, they met weekly to draw, then print the bodice.

Ms Tan said their win surprised them as they thought that others did as well, if not better.

Professor Galina Mihaleva, 50, from the art, media and design course, is proud of her students.

"I'm so happy because they worked so hard. Not only for this but also for their other modules," she said.

In the abacus category, the team from China won the \$10,000 top prize. They made an abacus in the shape of a traditional Chinese copper coin.

NTU's president, Professor Bertil Andersson, was heartened to see the quality of entries, both international and local.

He said: "I hope that our 3-D printing competitions will fuel the creative juices of young people all around the world and inspire both engineers and artists alike to embrace technology to better our lives."