

# Dancing with robots

## American scientist hopes to make humans partnering robots in a dance competition a reality.

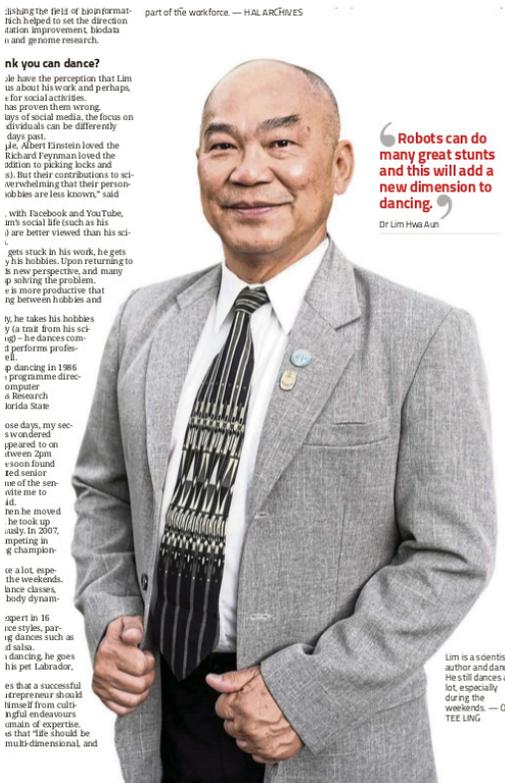
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### Robots can do many great stunts and this will add a new dimension to dancing.

— HAL ARCHIVES



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Lim is a scientist, author and dancer. He still dances a lot, especially during the weekends. — OOI TEE LING

Well, this will be possible at the first Silicon Valley World Creative Robot Competition (SVWCRC). It will be held from Oct 6 to 8 at Silicon Valley (San Jose), California, the United States. Registration starts next month.

"It will be the first time humans and robots dance together in a competition," said American scientist and author Dr Lim Hwa Aun.

He is on a mission to promote the event and said that since the competition is the first of its kind, many people will find the idea quite novel. To date, response has been positive.

Kedah-born Lim, 60, is chairman of Unesco CID SFS, organiser of the competition, Lim, and was in Malaysia recently.

A dancer, he explained, may hold a robot in the hand to create a certain effect. "Robots can do many great stunts and this will add a new dimension to dancing," explained Lim.

Lim said the organisers are not only wellversed with robot technology, but are accomplished dancers too.

"Between humans and robots, the latter will beat humans all the time!" he exclaimed.

Lim is amused that some competitive dancers have already "thrown in the towel" even before competing with robots.

"But what we're encouraging is, instead of dancing against robots, humans should partner them!"

Lim oversees the international committee of the competition. He gets renowned individuals to join as participants, advisors, organising committee members or sponsors.

Currently, the competition is tapping into its existing resources (from Lim's and other committee members' networks). Some of the organising committee members are from large high-tech companies.

From discussion to reality

More than three years ago, novelist Carmelita Chao proposed a project on robots to Lim. He was thrilled.

"Trends were already heading the way of robots," said Lim, how has authored 15 books. One of his books is about cloning which tackles the subject

of how humans would react to a clone or perhaps, a robot, in future.

His 2014 book, Multiplicity Yours talks about cloning, stem cell research and regenerative medicine. In the closing chapter, there is a scenario where two people are in an intimate conversation; one discovers that the other is a clone!

Said Lim: "How would the person react as the verisimilitude (likeness) of the clone gets closer and closer to a human?"

According to him, robotics is moving forward so rapidly that it is imminent that robots will be a major part of the workforce.

"In the future, instead of talking only about human resources, we will have robot resources to compete against. This is already happening. In fact, robots can be replicated and the likeness to humans is amazing!" Lim conceded.

After discussions over countless coffee sessions, Chao and Lim agreed upon a creative theme to promote robots to the public - "through dancing, not only of robot dancing, but also human-robot dancing".

Between October 1987 and November 1995, Lim was a tenured faculty member and program director at Supercomputer Computations Research Institute in Florida State University. He has also done computational work at the John von Neumann Center at Princeton University in New Jersey.

One of the milestones in his career is when he coined the neologism "bioinformatics" in 1986.

Lim is sometimes referred to as the "Father of Bioinformatics" for his contributions in establishing the field of bioinformatics, efforts which helped to set the direction of instrumentation improvement, biodata accumulation and genome research.

So you think you can dance?

Many people have the perception that Lim may be serious about his work and perhaps, has little time for social activities.

Well, Lim has proven them wrong.

"In these days of social media, the focus on the lives of individuals can be differently shaded from days past.

"For example, Albert Einstein loved

the violin, while Richard Feynman loved the bongos (in addition to picking locks and cracking safes). But their contributions to science are so overwhelming that their personal lives and hobbies are less known," said Lim.

Nowadays, with Facebook and YouTube, postings of Lim's social life (such as his dance videos) are better viewed than his scientific works.

When Lim gets stuck in his work, he gets away to enjoy his hobbies. Upon returning to work, he finds new perspective, and many times, ends up solving the problem.

He finds he is more productive that way – shuffling between hobbies and work.

Incidentally, he takes his hobbies very seriously (a trait from his scientific training) – he dances competitively and performs professionally as well.

Lim took up dancing in 1986 when he was programme director of Super-computer Computations Research

Institute at Florida State University.

"During those days, my secretary always wondered where I disappeared to on Thursdays between 2pm and 4pm. She soon found out that I visited senior centres ... some of the seniors would invite me to dance," he said.

In 1996, when he moved to California, he took up dancing seriously. In 2007, he started competing in world dancing championships.

"I still dance a lot, especially during weekends. I also teach dance classes, emphasising body dynamics."

Lim is an expert in 16 ballroom dance styles, particularly swing dances such as the hustle and salsa.

Other than dancing, he goes jogging with his pet Labrador, Midnight.

Lim believes that a successful scientist or entrepreneur should not restrain himself from cultivating meaningful endeavours outside his domain of expertise.

He espouses that "life should be 'rounded' or multi-dimensional, and not 'flat'."