



A view of the Tumo Center for Creative Technologies in Yerevan.



In robotics classes, Armenian teens dream of high-tech future

In a sleek classroom in Yerevan, the capital of Armenia, one of the poorest post-Soviet republics, 14-year-old Nazeli Ter-Petrosyan peers at the screen of her Apple Mac. During a computer programming course offered at the high-tech Tumo school, Ter-Petrosyan and her classmates learn how to digitize medieval texts. "I'm developing a program to enable artificial intelligence to read old manuscripts," said the teen. Her computer screen features a page from a 15th century Bible held at Armenia's famed repository of ancient writings, the Matenadaran.



Pegor Papazian, chief development officer of the Tumo Center for Creative Technologies, speaks during an interview in Yerevan. — AFP photos

Armenia, which is known for its rich history and troubled past, has grappled with poverty, unemployment and a brain drain since the breakup of the Soviet Union in 1991. But despite a stagnant economy, Armenia's tech sector has been booming over the past decade, boosting hopes that

one day the resource-poor country can become a global IT powerhouse. Tumo is a cutting edge, after-school learning centre, where around 7,000 Armenians aged 12 to 18, from all walks of life, study for free.

Packed with hundreds of computers with industry standard software, 3D printers, video cameras and an animation studio, Tumo gives youngsters an opportunity to study web design, robotics, animation, music, digital media and more. The project has been so successful that there is already a Tumo school in Paris and plans for others in Europe and the United States are under way.

In one of the centre's workshops, students are buzzing with excitement as they learn how to build robots from Lego kits and program them to perform tasks like collecting rubbish or making a salad. "We are working on projects that we will be able to later use in our everyday life," said Davit Harutyunyan, 14, as he showed off a half-assembled robot.

One third in poverty

The South Caucasus country of three million people boasts a vibrant startup scene and its tech workers have been a driving force behind a wave of peaceful protests that ousted the old elite from power in 2018. Tumo aims to raise the next generation of tech professionals and play a role in creating a knowledge-based economy in a country where 30 percent of the population live in poverty. "We've got very ambitious plans," chief development officer Pegor Papazian said. "We want to become one of the world's most competitive labor markets," added Papazian, who holds a master's degree from Massachusetts Institute of Technology (MIT) in the United States.

The non-profit centre was founded in 2011 by Sam and Sylva Simonian, a US-based couple who are part of the influential Armenian diaspora formed largely as a result of



This handout picture shows German Chancellor Angela Merkel visiting the center's premises in Yerevan.

World War I massacres by the Ottoman forces. The school occupies two floors of a six-storey pink tufa stone building, located on the outskirts of Yerevan in the shadow of Mount Ararat which stands just across the border in Turkey. The Simonians provided the initial investment of \$60 million to set up the project but it is now largely self-sustaining, with the centre renting out several floors to tech companies.

The school's gleaming facade and huge windows contrast with dilapidated Soviet-era residential buildings nearby. Inside the futuristic, open-plan premises, mobile computer workstations allow students to move around freely. "In Armenia what Tumo offers is extraordinary," Julian Sefton-Green, a professor of new media education at Deakin University, in the Australian city of Melbourne, told AFP in emailed comments. Tumo offers "a particular vision of a techno future," said Sefton-Green, who visited the school and studied its educational model.

From Merkel to Kanye West

On average, students spend two to three years at the centre. They create their own learning plans and are assisted by instructors, many of whom come from companies such as Google and Pixar. There are no grades and, at the end of their studies, students receive digital portfolios showcasing their work. Tumo has established three satellites across the country and Azerbaijan's breakaway region of Nagorny Karabakh. Plans are under way to open more than 20 centers over the next 10 years.

Papazian said the staff had been struck by the poverty in which some of their students live. "We are helping them discover a new world," he added. The authorities have embraced the initiative and it has become a ritual for foreign dignitaries and other top guests to visit the school. Grammy-award winning rapper Kanye West, whose wife Kim Kardashian is of Armenian descent, toured the premises in 2015.

Last year, the school also earned rave reviews from German Chancellor Angela Merkel. "This Tumo is not for Armenia only. It's international. It's a philosophy," she said in August during the first visit to Armenia by a German chancellor. In some ways, the Tumo project could be viewed as being ahead of its time for Armenia, which still lacks the rule of law and a stable economy, among other things.

Sefton-Green said that only time would tell if the pioneering school would help reshape the country. "Unless there is structural economic response to the kind of investment Tumo has offered, it is possible that benefits will not be felt," he said. "However the country itself is in a good place to be able to rise to these kinds of challenges." —AFP

OMEGA celebrates 50th anniversary of first lunar landing

OMEGA hosted a star-filled tribute to the 50th anniversary of the first lunar landing with George Clooney and an impressive line-up of NASA veterans: including Charlie Duke and Thomas Stafford. It was a gathering of greats at Florida's Kennedy Space Center when OMEGA paid tribute to the mission that made history. After a day of discussions on a range of space-related subjects, media and VIP guests enjoyed a "Golden Moments" dinner served beneath the impressive Saturn 5 rocket, which was attended by George Clooney, Amal Clooney, Charlie Duke and Thomas Stafford.

Clearly proud of the Swiss brand's claim-to-fame as the first watch worn on the Moon, President and CEO of OMEGA Raynald Aeschlimann summed up the spirit of the occasion. "It's a huge achievement to land on another world. I can't think of a better reason to raise a glass in tribute." Though OMEGA Ambassador George Clooney drew a great deal of media attention, the self-effacing actor was

determined to ensure the spotlight stayed focused on his fellow guests.

"It's a great pleasure to be here - and an honor. I have enormous respect for the people who made the Apollo missions such a success," George Clooney was joined on stage by veteran of four NASA space missions and commander of Apollo 10 Lieutenant General Thomas Stafford, along with CAPCOM for Apollo 11 and Apollo 16 lunar module pilot Charlie Duke. Reflecting on the pioneering spirit of the Apollo era, Charlie Duke described it as an exciting time but stressed that the success of the 1969 mission was down to hard work and commitment.

"We were heading to the Moon, but we were also grounded, very realistic, and we never took success for granted, not once." Apollo 10's Thomas Stafford talked about the "alien yet familiar" qualities of the lunar surface, and spoke proudly of his role in Apollo 11's glory. "It was a great honor for me to play my part in the successful mission

that followed." Also in attendance were Astronaut and artist Nicole Stott, NASA pilot and ISS commander Terry Virts, ESA astronaut and NASA veteran Jean-Francois Clervoy, and former NASA engineer and the man behind the Moonwatch, Jim Ragan.

To mark the 50th anniversary OMEGA released a 42 mm Speedmaster in 18K Moonshine gold - an exclusive new alloy which offers a paler hue than traditional yellow gold and higher resistance to fading over time. The design is replete with lunar history as well as modern materials and a superb new movement: OMEGA's Master Chronometer Caliber 3861 - a manual-winding OMEGA Co-Axial escapement movement with Moonshine gold plated main plate and bridges, as well as burgundy markings.

