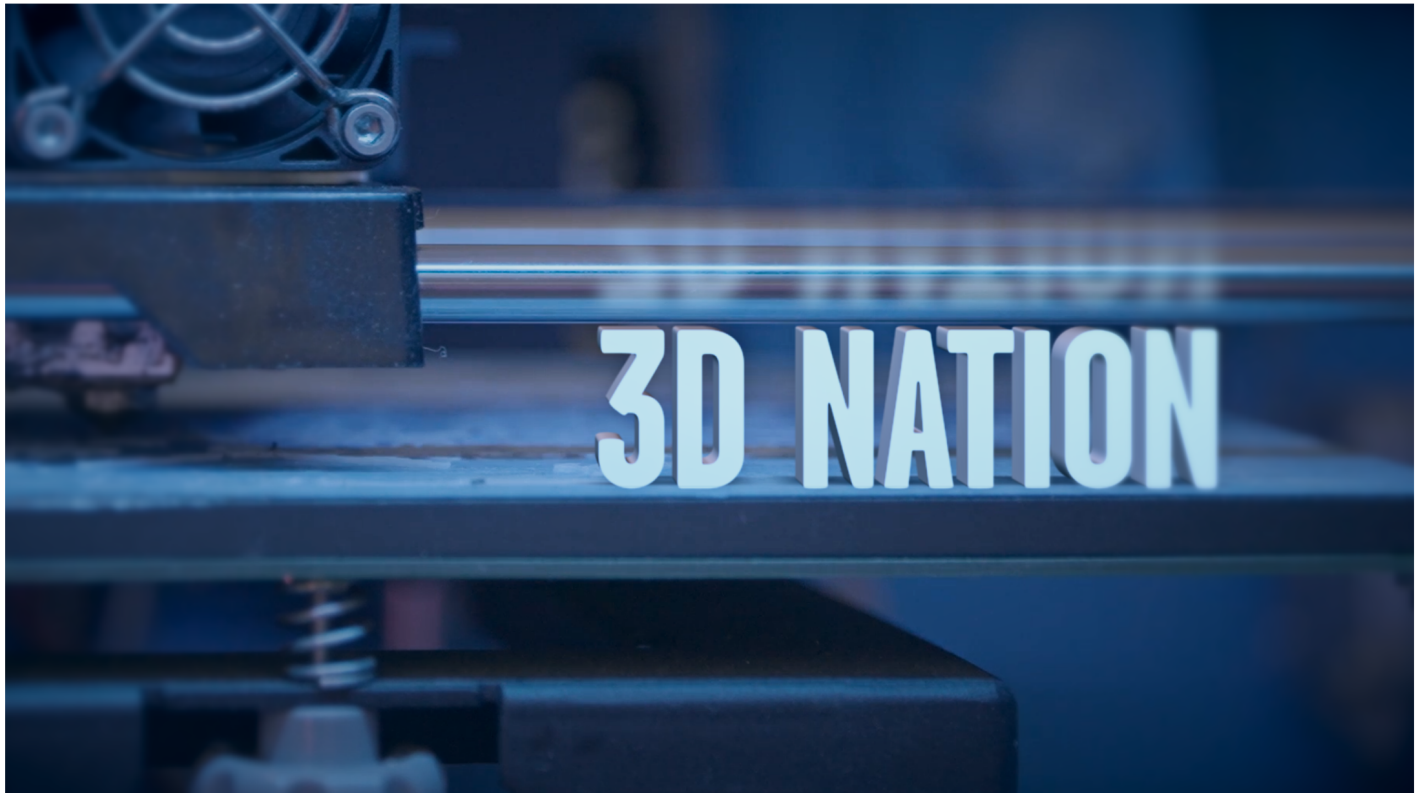




We have the latest & greatest original content spanning multiple genres, plus a library holding over 20,000 hours of award-winning titles.

Documentaries & Factual - Human/Social Interest



3D Nation

Episodes: 8 x 30 mins

Language: English

Year: 2022

Producer: Verite Productions

Distributor: Mediacorp

If artificial intelligence is the head, then additive manufacturing or 3D printing makes its perfect hands. The exciting combination of the two is paving the way for applications that are already disrupting major industries and directly impacting our everyday lives.

From foods for hospital patients to art that has traveled to the moon and back, and even life-saving medical innovations, the inconceivable is being built right before our very eyes.

Each episode features a specific facet or sector in Singapore where we delve into the jaw-dropping revolution and debate over the implications at play. Part science exploration, part tech analysis and part social commentary, 3D Nation is a provocative watch for anyone with a stake in our future.

Information correct at time of printing

contentdistribution.mediacorp.sg

For sales enquiries on content distribution:

Grace Chia gracechia@mediacorp.com.sg

Tracy Sim tracysim@mediacorp.com.sg

Wilfred Chen wilfred.chen@mediacorp.com.sg



Episode 1 - Enhancing Lives

How is 3D printing technology enhancing lives?

Lucky, a husky suffering from mental challenges, struggles while eating. He loses his balance while trying to eat out of a food bowl on the floor. His owner Ian Lin engages the help of Tony Mochala, a 3D printing specialist, to design an unlikely device to solve this peculiar problem. Even with his wealth of experience working with customers from a myriad of industries, Tony has never 3D printed for dogs. How will Lucky take to his one-of-a-kind feeder?

A local company produces fully customised in-ear monitors (IEMs) for musicians in Singapore and abroad through 3D printing technology. Co-founder Ivan Cheong welcomes Jeremy Monteiro and Louis Soliano into the store to create bespoke pieces for these jazz legends. At the recording studio, Louis performs with his pair of IEMs for the very first time in his career. How will they sound?

Episode 2 - Saving Lives

How is 3D printing technology saving lives?

A doctor uses the technology to visualise and strategise for an upcoming complex surgery. To remove a massive bone tumour at the back of a patient's knee, Dr Henry Soeharno from Singapore General Hospital harnesses the power of 3D printing as a surgical aid tool to conduct a trial surgery with his team. How will this impact the actual upcoming operation in the operating theatre?

A Singapore medical device company creates patented 3D printed implants for different parts of the human body. Jing Lim, their Chief Technology Officer, works with surgeons around the world to revolutionise the international medical industry. For a young man struggling with a concave chest, a fully customised 3D printed scaffolding allows human tissue to grow over the device before it disappears into the body.

Will this be a success?

Episode 3 - To the Moon and Back

How is 3D printing technology fueling the growth of arts and culture in Singapore?

Lakshmi Mohanbabu is the first and only Singaporean artist to send her work for an exhibition on the moon. Her 3D printed cube, inspired by universal themes of humanity, has been chosen by the Moon Gallery to be a part of a collection of 100 works of art. Working with engineers from NTU, she makes history and witnesses the launch into space. Will the first-ever extraterrestrial art gallery survive its journey into the unknown?

The Asian Civilisations Museum's Audience Team is launching a new initiative to create physical replicas of priceless artefacts through 3D printing technology for the visually impaired to interact with. This move to create a more inclusive museum experience for the public is conceived by their audience manager, Prunella Ong. How will the blind take to this experience?

Episode 4 - Food for Life

How is 3D printing technology changing the way we eat?

Professor Chua Chee Kai from SUTD is organising the world's very first 3D food printing competition. Students from local junior colleges, polytechnics and cooking academies are given a crash course on 3D food printing before battling it out to impress judges from the food industry. How will their passion, originality and the power of 3D printing translate into their dishes?

An entrepreneur dreams of solving nutrition and global food supply chain problems with 3D printing. Anirudh Agarwal imagines a world where printers in restaurants and homes can prepare bespoke meals that cater to an individual's specific nutrition needs. The engineer is currently developing a 3D food printer that does just that. His next round of funding depends on an upcoming presentation to the National Additive Manufacturing Innovation Cluster. Will he be able to win them over with his grand ambitions?

Episode 5 - Transporting the World

How is 3D printing technology being used to upgrade the replacement of faulty airplane and shipping parts?

Hounan Cai runs a startup that solves this problem in the aviation industry – replacing parts more quickly, economically and environmentally friendly. Their solution also extends to specific parts of the cabin interior that may no longer be in production. Can they change perceptions and challenge century-old production practices in the industry?

Ong Ken Lip works for an established multinational conglomerate that provides a similar solution for the shipping industry. The head of additive manufacturing, Ken works with his team to offer 3D printed replacements for vessels globally. Extensive research and development are ongoing to ensure that their products match up with their non-3D printed counterparts. Will their latest efforts pass the strictest industry testing?

Episode 6 - Designing the Future

How is 3D printing technology elevating fashion in Singapore?

Lionel Wong and Jamela Law run a fashion label that conjures up mesmerising and wearable pieces of garments and accessories through 3D printing technology. Their imaginative works have graced publications, walked runways and exhibited in museums. Their new project is a collaboration with one of the world's most iconic brands in the beverage industry. What 3D printed outfit will this unlikely pairing create?

In the world of fine jewelry, 3D printing technology is also breaking new ground. Imagine a bangle with a design so intricate that even the most experienced artisan will find it hard to create. Or a pendant that is printed specifically from the ashes of a customer's late pet. Caroline Wihono is a fourth-generation jeweller who is up for these unique challenges. Can she deliver these one-of-a-kind pieces?

Episode 7 - Transforming the Human Body

How is 3D printing technology helping babies and adults who have special medical conditions and injuries?

A man lost the use of his arm after an accident during a hiking expedition. Another had to amputate part of his leg after catching an infection during a skiing trip. Tabitha Quake is an orthotist who is discovering new ways to help her patients through 3D printing. How exactly does she navigate this fascinating technology in the field of prosthetics and orthotics?

For babies born with misshapen heads, 3D printed helmets worn during the early months of their lives are proving to be an effective treatment. But during the global pandemic, many mothers and their infants could not access health services like this. So Heidi Mak collaborated with technology partners to develop an app that turns mobile phones into 3D scanning devices, allowing just about anyone to create highly customised helmets that can be delivered upon creation.

Episode 8 - Building Our Tomorrow

How is 3D printing technology reinventing the construction industry?

Shaun Wu is a 3D concrete printing specialist who is working with the HDB Building & Research Institute to develop projects for the future. At the largest 3D printing facility in Southeast Asia, they are researching effective ways to take the construction industry in Singapore to the skies. Recognised by the world as a leader in public housing, will this new technology further their legacy?

The NTU Singapore Center for 3D Printing is conducting research with unconventional construction materials that will promote sustainability. Their latest focus is NEWSand – a product generated from incinerated bottom ash, the thicker and heavier component of incinerated ash. Professor Tan Ming Jen and his team are attempting to 3D print a bathtub with this material in hopes of revolutionising the design and construction industry. Will their experiment offer answers that the industry is currently in search of?

Information correct at time of printing

contentdistribution.mediacorp.sg

For sales enquiries on content distribution:

Grace Chia gracechia@mediacorp.com.sg

Tracy Sim tracysim@mediacorp.com.sg

Wilfred Chen wilfred.chen@mediacorp.com.sg