Industry Project Highlights

(Artist impression generated by Co-Pilot)

Floating Futures: Sustainable Platforms with Large-Format 3D Printing

PI: *Assoc. Prof Tay Zhi Yung;* ***Collaborator:*** *WorldBizz*

Versatile modular floating platforms for recreation and aquaculture are created using DfAM and large-format 3D printing, with sustainable materials and adaptable designs providing customisable, eco-friendly solutions for diverse coastal and marine environments.

Economy Impact: Reduce costs and supports growth of Singapore's blue economy

(Artist impression generated by Co-Pilot)

Reinventing Spares for Singapore's Public Transport

PI: *Assoc. Prof Gan Hiong Yap;* ***Collaborator:*** *SBS Transit*

3D printing of non-critical spare parts using DfAM improves durability, speeds production, and lower costs, enabling local service bureaus to support Singapore's transport supply chain and Maintenance, Repair & Overhaul (MRO) activities.

Economy Impact: Reduces import dependence and creates opportunities for local 3D printing providers

(Artist impression generated by Co-Pilot)

Redefining USV Production with Additive Innovation

PI: *Asst. Prof Kyrin Liong;* ***Collaborator:*** *ICS*

AM offers a faster, more flexible approach to Unmanned Surface Vehicle (USV) structure fabrication, reducing lead times and costs while enabling complex designs for efficient production and deployment.

Economy Impact: Supports local marine manufacturing and services, lowering costs and contributing to Singapore's blue economy

Exciting Moment!

(Image: TCT, Rainshadow Studios)

TCT Creative Application Award: *Highly Commended (Scarce City by SIT)*

The Scarce City project was awarded a Highly Commended honour at the TCT Awards 2025. In this project, NAMIC Hub@SIT collaborated with Rainshadow Studios from concept to sustainable production — quite literally, bringing the idea to life through the power of AM.

The Scarce City project is the result of three years of collaboration among experienced artists, game designers, engineers, and educators led by Elizabeth Mak. The project combines serious gaming with immersive theatre in a light-based resource management experience, set within a 3D-printed world featuring over 4,000 parts and more than 1,000 unique designs.

Heads-up! This September, you have the opportunity to visit a curated edition of Scarce City at SIT Library (W1-L5), a unique showcase available for a limited time. Check it out before it's gone!

Check out about Scarce City:	[SITE]
Learn more about how AM fused with Art:	[NEWS]
Behind-the-scenes:	[VIDEO]

MORE INFO

Flashback

Industry Seminar: Uncovering Opportunities in Large Format AM

Attendees gained valuable insights through an engaging industry workshop led by CEAD, a leading Dutch specialist in large-format polymer and composite additive manufacturing (LFAM). The workshop showcased LFAM technology, highlighting its capabilities, applications, and potential benefits for producing large, high-strength, lightweight components across various industries.

IES Railway & Transport Chartered Engineers Night

IES hosted an insightful session on driving innovation in the Railway sector. Asst. Prof Hoh Hsin Jen presented an AM application (funded by NAMIC) tailored for the Rail sector and a broader showcase of AM use cases, highlighting the potential to unlock AM opportunities across the railway and transportation industries.

ASME Student Sections Industrial Visit to Additive Innovation Centre (AIC)

The American Society of Mechanical Engineering (ASME) Student Sections from SIT, NTU and NUS gained first-hand insights into advanced AM technologies, explored AM industrial applications and engaged directly with industry practitioners through showcases of both engineering and non-engineering applications.

Engineering and Tech Programme Scholarship (ETPS) Workshop

As part of the ETPS Workshop, NAMIC Hub@SIT conducted a session introducing AM, demonstrating Fused Deposition Modelling (FDM) operations, and showcasing 3D scanning. This gave participants hands-on exposure to digital workflows and innovations in engineering and technology.

Industrial Highlights

(Image: Tatler Asia)

Singapore's first 3D-printed house in Bukit Timah

Architect Lim Koon Park has completed Singapore's first 3D-printed concrete house in Bukit Timah, a four-storey home built with robotic printing by CES_InnovFab. Featuring a central oculus for natural light and ventilation, along with curved, textured walls, the house blends sustainability with futuristic design. Now occupied by Lim's family, it was awarded *Interior Design's* 2024 Best of Year in the "Medium City House" category.

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(Image: Mothership)

KKH Launches Singapore's First PlagioCentre with 3D-Printed Helmets

KK Women's & Children's Hospital has opened the PlagioCentre, the first in Singapore dedicated to treating infant flat-head conditions like plagiocephaly and brachycephaly. For moderate to severe cases in babies under 8 months, custom 3D-printed helmets are used to gently guide skull growth. Designed using 3D scans, the helmets typically show visible results within 2 to 3 months.

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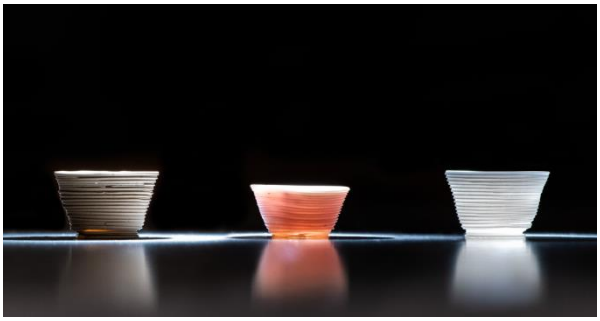

(Image: Lincoln Laboratory)

MIT Researchers Crack 3D Printing with Glass

MIT researchers have developed a new technique to 3D print inorganic glass composites at just 250 °C—far lower than traditional glass processing. This allows the creation of complex, transparent structures without high-temperature furnaces, making it ideal for optics, microfluidics, and electronics applications. The innovation offers faster, safer, and more energy-efficient glass manufacturing.

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(Image: dezeen)

Tor Alva: World's Tallest 3D-Printed Tower Debuts in Swiss Alps

ETH Zurich and the Origen Foundation have unveiled *Tor Alva* in Switzerland, the world's tallest 3D-printed concrete tower at nearly 30 m tall. Constructed in around 900 hours with approximately 2,500 layers, it features 32 unique sculptural columns printed without formwork using a dual-robot system that embeds reinforcement on the fly.

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Upcoming Events

Singapore AM Week 2025

Last held in 2023, Singapore AM Week is a week-long series of AM activities, including workshops, tours, and a conference summit. Bringing together international experts and industry leaders, it showcases 3D printing's role in transforming design, manufacturing, and recycling.

Date: 13 to 17 October 2025

REGISTER HERE

Global AM Summit 2025

The NAMIC Global AM Summit returns for its 14th edition this year! Themed "Unlocking Agility and Scale with Digitalisation and Additive Manufacturing", this year's summit will feature topics on how additive manufacturing and digital technologies are transforming industries, enabling scalable production, and driving circular economy manufacturing.

Date: 16 to 17 October 2025
Venue: Max Atria Singapore EXPO

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