

WORLD'S FIRST 3D-PRINTED STEEL BRIDGE OPENS TO PUBLIC IN AMSTERDAM

Relevant for: Science & Technology | Topic: Science and Technology- developments and their applications and effects in everyday life

Her Majesty Queen Máxima of the Netherlands unveiled the bridge. | Photo Credit: [MX3D](#)

World's first 3D-printed steel bridge was opened to the public in Amsterdam earlier this month. It was developed by MX3D, a Dutch robotics company, in collaboration with a consortium of experts, and represents a major milestone for 3D-printing technology.

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After four years in development, the bridge was unveiled by Her Majesty Queen Máxima of the Netherlands. It was installed over one of the oldest canals in Amsterdam's city centre – the Oudezijds Achterburgwal.

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The 12-metre-long steel structure will be a 'living laboratory' that will capture and transmit data on its health in real-time to show how it changes over its lifespan. The smart sensor network was designed and installed by a team from The Alan Turing Institute.

The sensors attached to the structure will gather data on air quality, temperature, strain, displacement and vibration. The data will be used by the bridge's 'digital twin', a computer model that will emulate the actual bridge in real-time, to improve accuracy over time. The computer model will help understand how a full-scale 3D-printed steel structure works in real-world.

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"3D printing is poised to become a major technology in engineering, and we need to develop appropriate approaches for testing and monitoring to realise its full potential," Mark Girolami, Professor at The Alan Turing Institute, said in a release. "When we couple 3D printing with digital twin technology, we can then accelerate the infrastructure design process, ensuring that we design optimal and efficient structures with respect to environmental impact, architectural freedom and manufacturing costs."

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Twitter, Google, Microsoft and Photoshop maker Adobe urged the U.S. Congress to come together to protect Dreamers, with Google saying they wanted DACA to be "cemented" into law.

Josh Giegel, the chief executive and co-founder of Virgin Hyperloop foresees us zipping between cities in minutes.

END

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