



# 3D Printing

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# Applications for 3D-Printing

- ▶ 3D-Printing technology, also known as additive manufacturing, has a surprising amount of applications
- ▶ Such applications include:
  - ▶ Art
  - ▶ Fashion
  - ▶ Science
  - ▶ And many more

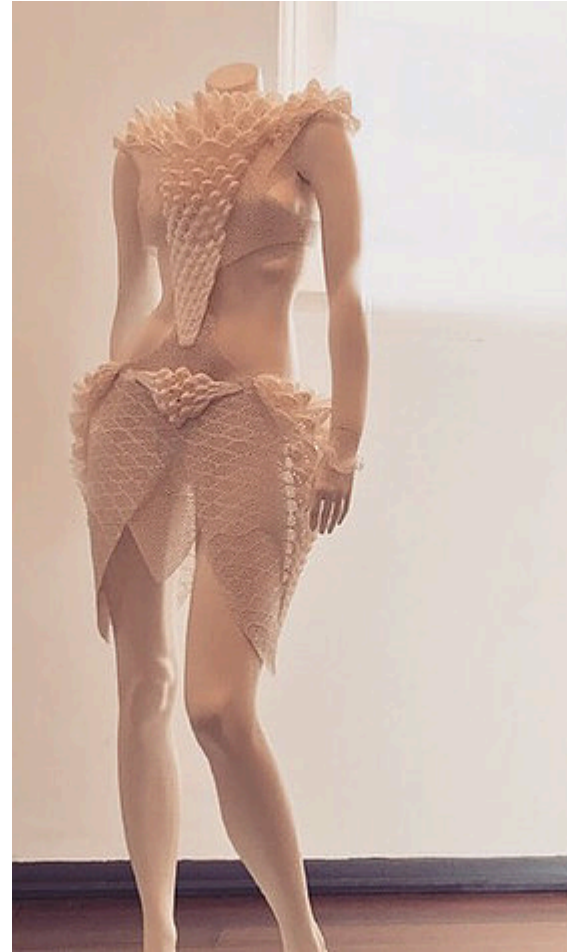
# Art

- ▶ 3D-Printing as an art form is also becoming very popular
- ▶ Due to the dynamic nature of 3D-printing technology, as well as the plethora of materials available to be printed with, artists are finding all kinds of unique applications for the technology



# Fashion

- ▶ Fashion is yet another area in which artists and designers are pushing the limits to create some very interesting pieces



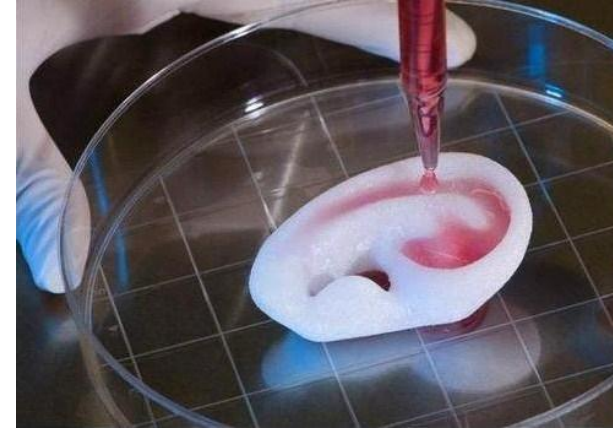
# Science

- ▶ Science is just one of many areas where 3D-printing is making tremendous strides
- ▶ Among the many applications of 3D-Printing in science are the printing of artificial organs and prosthetics



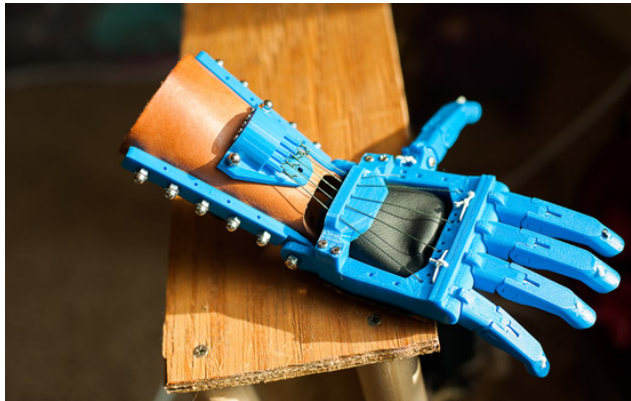
# Artificial Organs

- ▶ Unsurprisingly, the main purpose of this area is to create artificial organs for transplant surgeries
- ▶ Although research is still being conducted, hollow structures such as the bladder, as well as vascular structures such as urine tubes have already reached clinical implementation

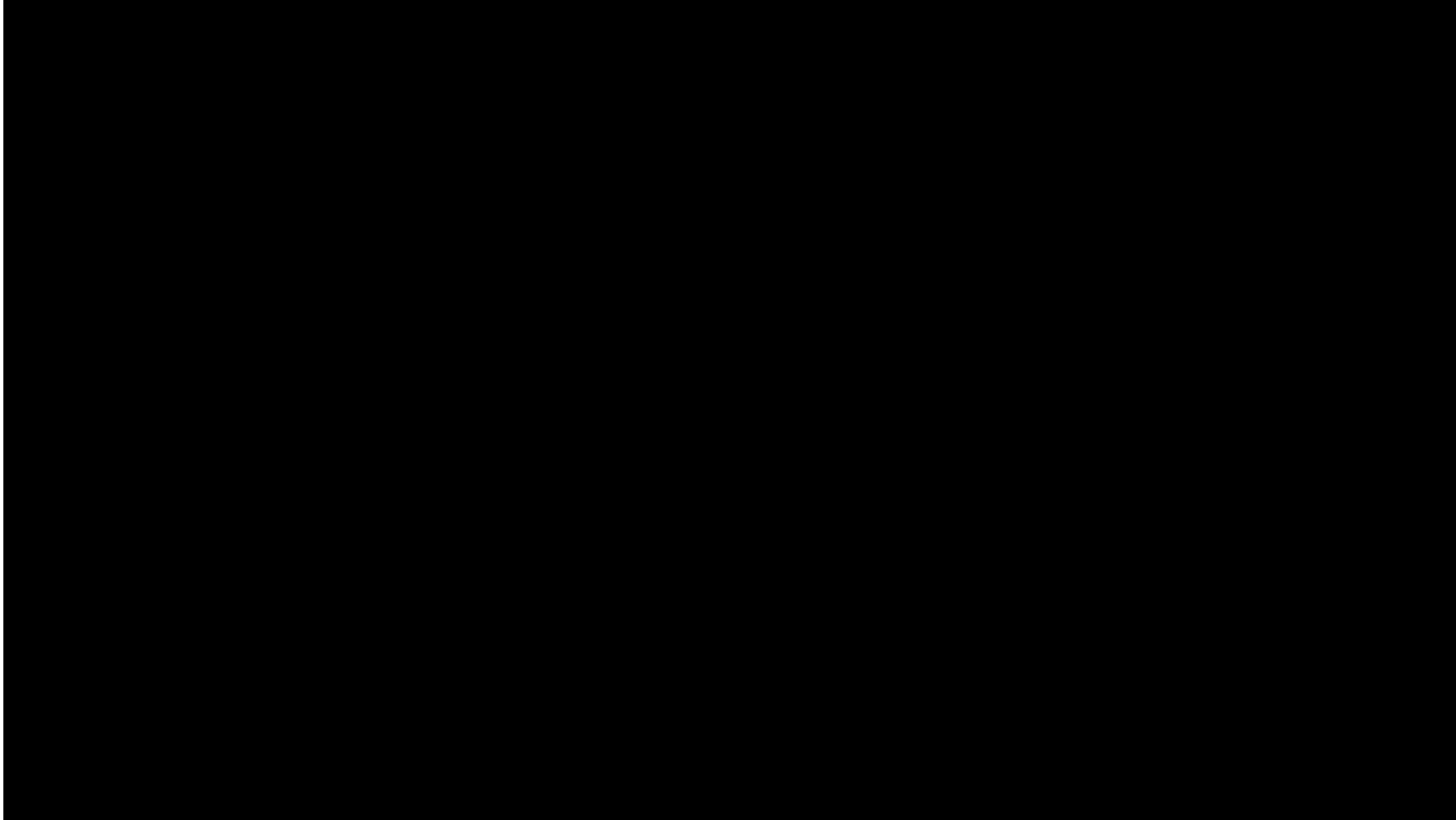


# Prosthetics

- ▶ Traditionally, prosthetic limbs are extremely expensive to manufacture
- ▶ With advances in 3D-printing, however, prosthetic limbs can be manufactured quickly and cheaply



# More in 3D-Printing



<https://www.youtube.com/watch?v=FSu19nz7NLE>



# Sources and More Information

## ▶ Art

- ▶ <https://www.shapeways.com/blog/archives/1106-Sophie-Kahns-3D-Printed-Sculpture.html>

## ▶ Fashion

- ▶ <https://3dprintingindustry.com/news/simone-leonelli-blurred-boundaries-art-fashion-3d-printing-121440/>
- ▶ <https://www.w230.net/>

## ▶ Science

- ▶ [https://en.wikipedia.org/wiki/Organ\\_printing](https://en.wikipedia.org/wiki/Organ_printing)
- ▶ <https://www.theguardian.com/technology/2017/feb/19/3d-printed-prosthetic-limbs-revolution-in-medicine>

## ▶ More

- ▶ <https://www.youtube.com/watch?v=FSu19nz7NIE>