



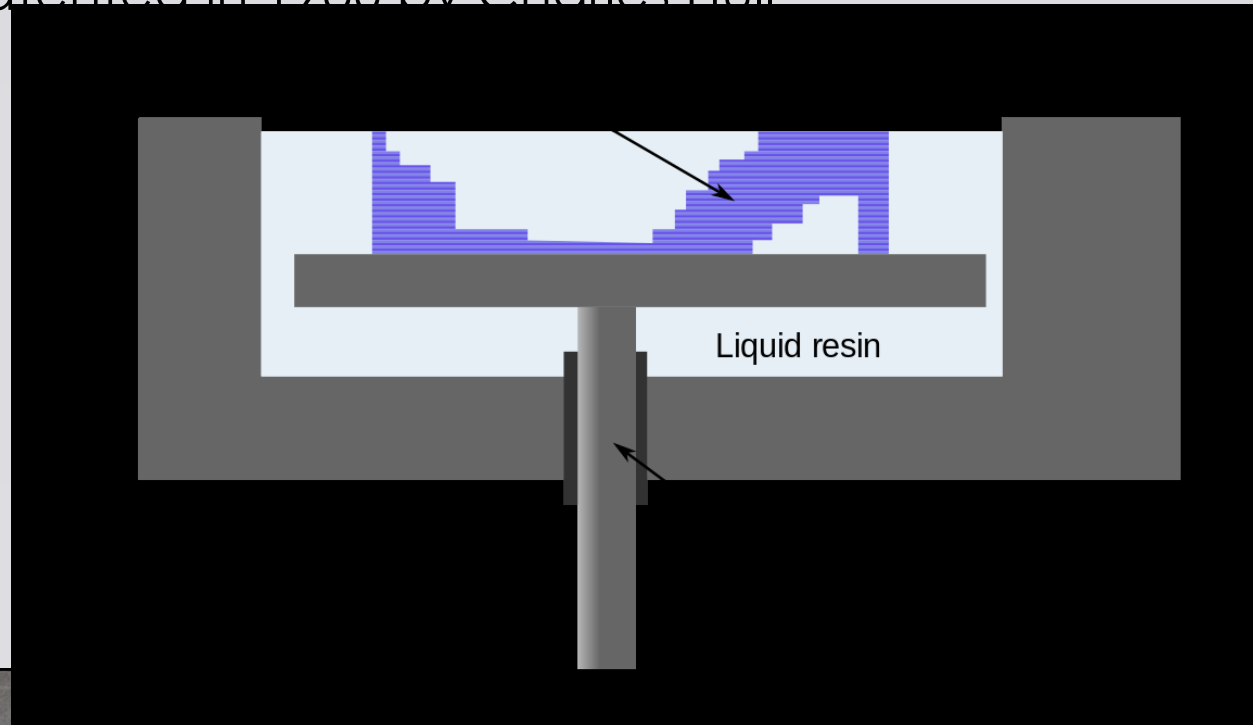
3D printing

Engineering Summer Camp for the Elite 2016

Department of Computer Science

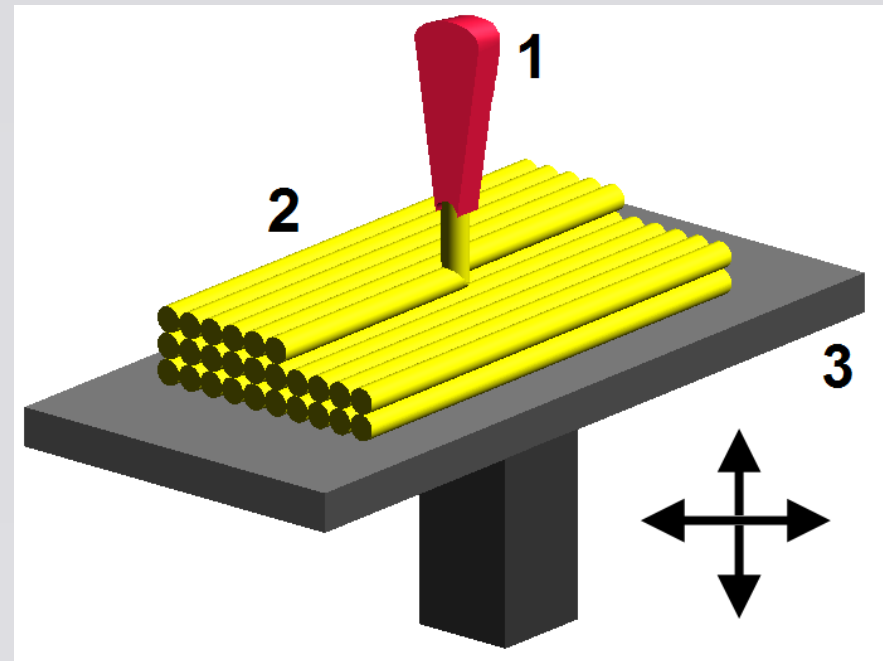
Stereolithography

- Research started in 1970's
- Patented in 1986 by Charles Hull



Fused deposition modelling

- Developed in late 1980's, by Scott Crump.
- Commercialized in 1990's






Problems in 3D printing

- Resolution
- Materials
- Support



3D printing used in education

- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/251439/3D_printers_in_schools.pdf

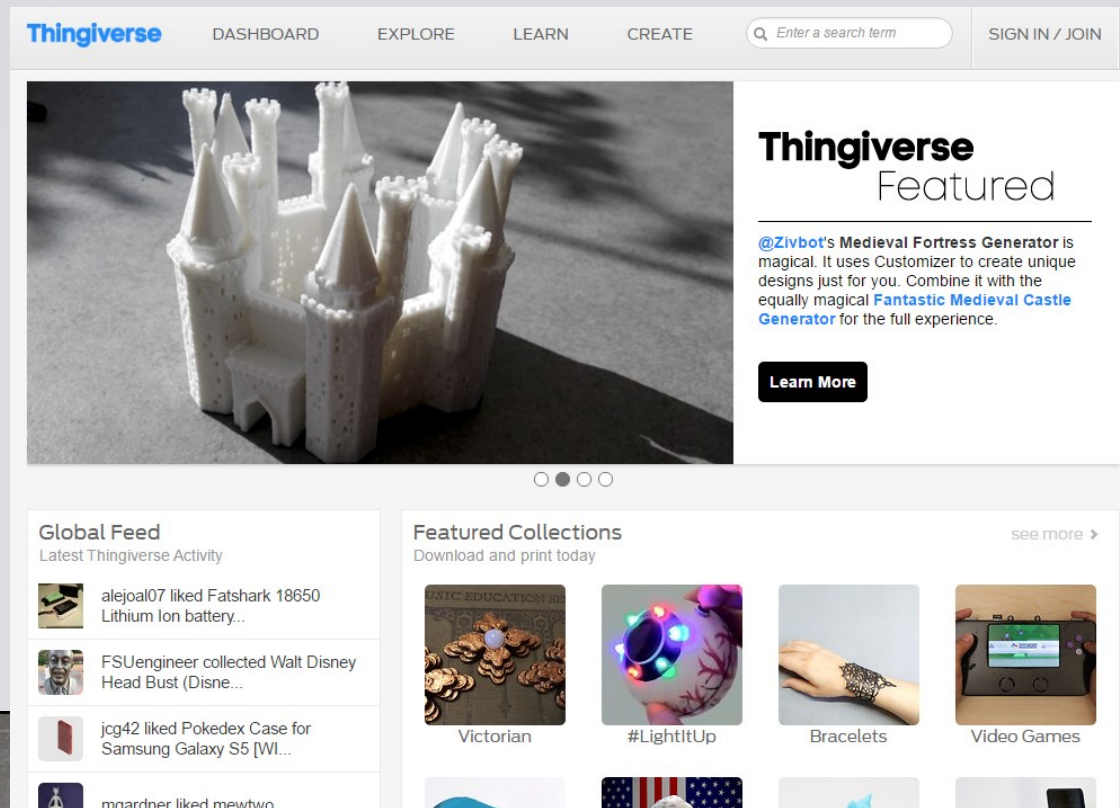



3D printing future?

- Food printing
 - <http://www.3dsystems.com/culinary/gallery>
 - <https://3dprint.com/129130/foodini-food-3d-printer/>
- Organ printing
 - <http://www.nature.com/news/the-printed-organs-coming-to-a-body-near-you-1.17320>
- Building printing
 - <http://www.wired.co.uk/article/giant-3d-printer-builds-houses>
 - <http://3dprintingindustry.com/news/construction-of-worlds-1st-3d-printed-bridge-begins-in-amsterdam-60110/>

What others are printing

- <http://www.thingiverse.com/>





3D modelling software

- 3D builder in Windows 10
- Sketchup (<http://www.sketchup.com/download>)
- 3Dtin (<http://www.3dtin.com/>)