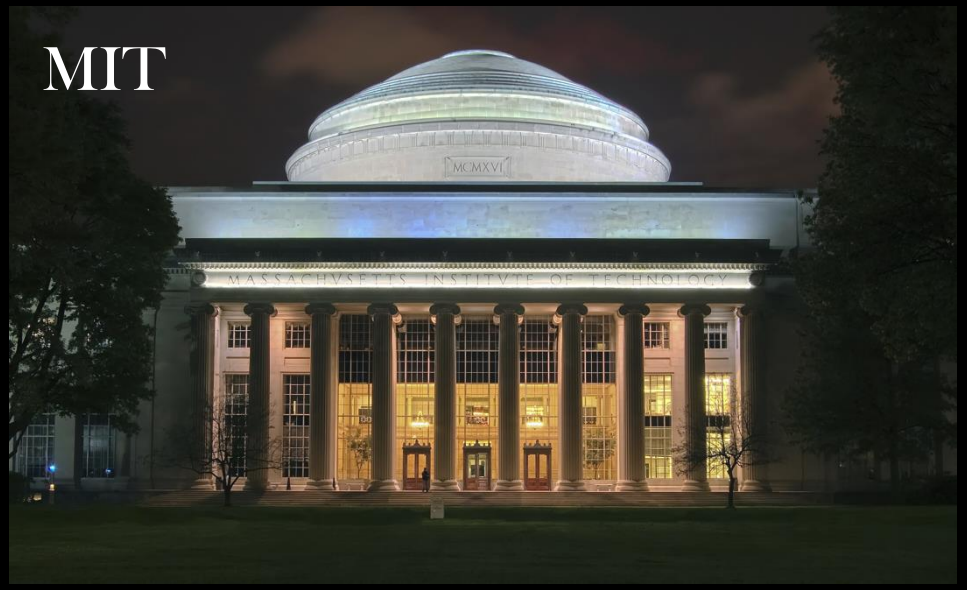
LuBan

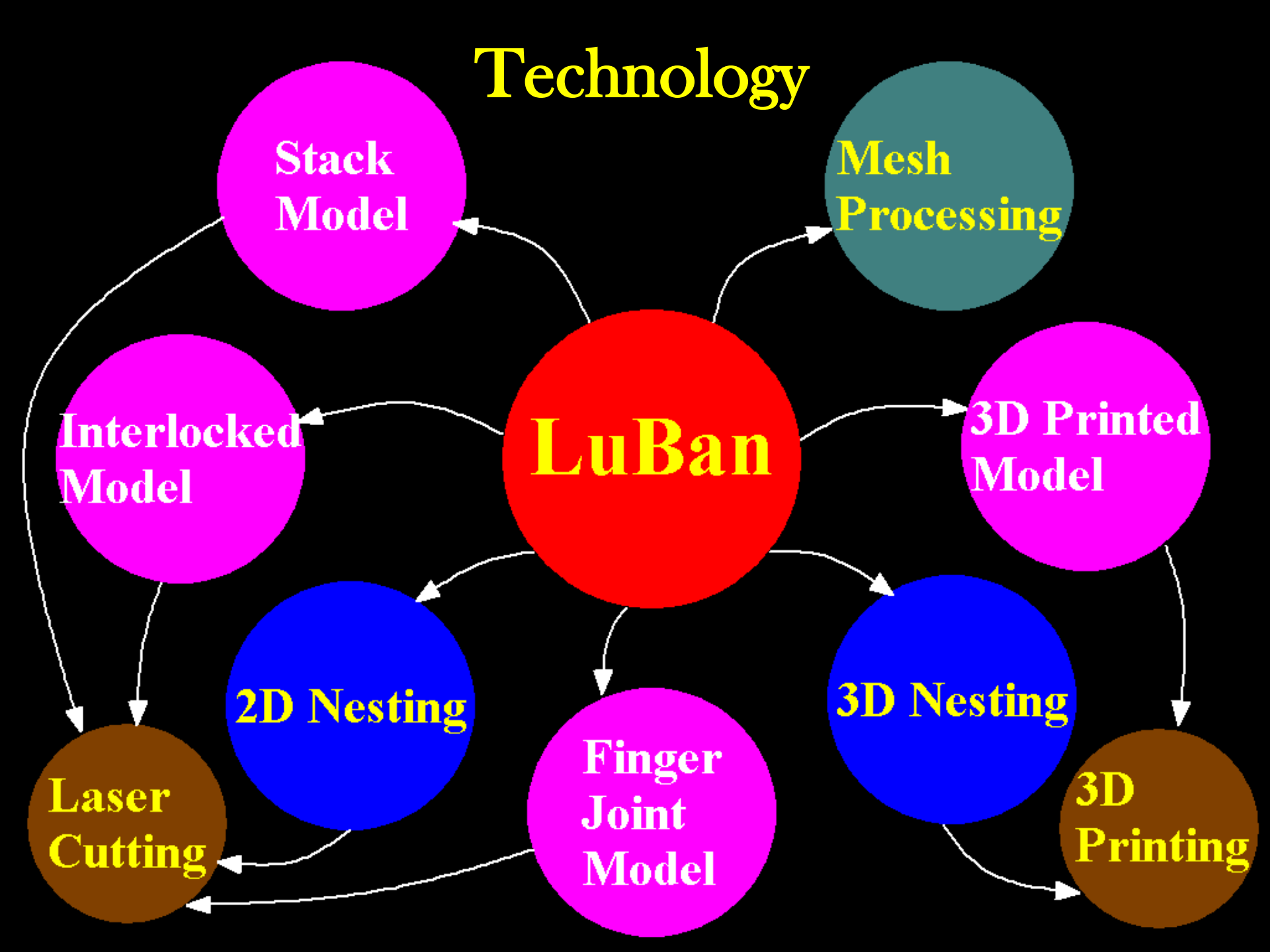
Introduction

Discovery

LuBan is next-generation, generative CAD/CAM software discovered at Massachusetts Institute of Technology (MIT) and developed at Singapore University of Technology and Design (SUTD) to help designers and makers improve physical production of their creations.



Technology


Stack Model
Mesh Processing
Interlocked Model
LuBan
3D Printed Model
2D Nesting
3D Nesting
Laser Cutting
Finger Joint Model
3D Printing

Application

CAD/CAM
Metal Cutting
(Ship building
& repair)

New Design Tool:
Generative Design

Advanced
Manufacturing

Model making
(Architecture,
Education)

Mold making,
Formwork
(Construction)

Large-Scale
3D Printing
(Art, Museum)

Advantages

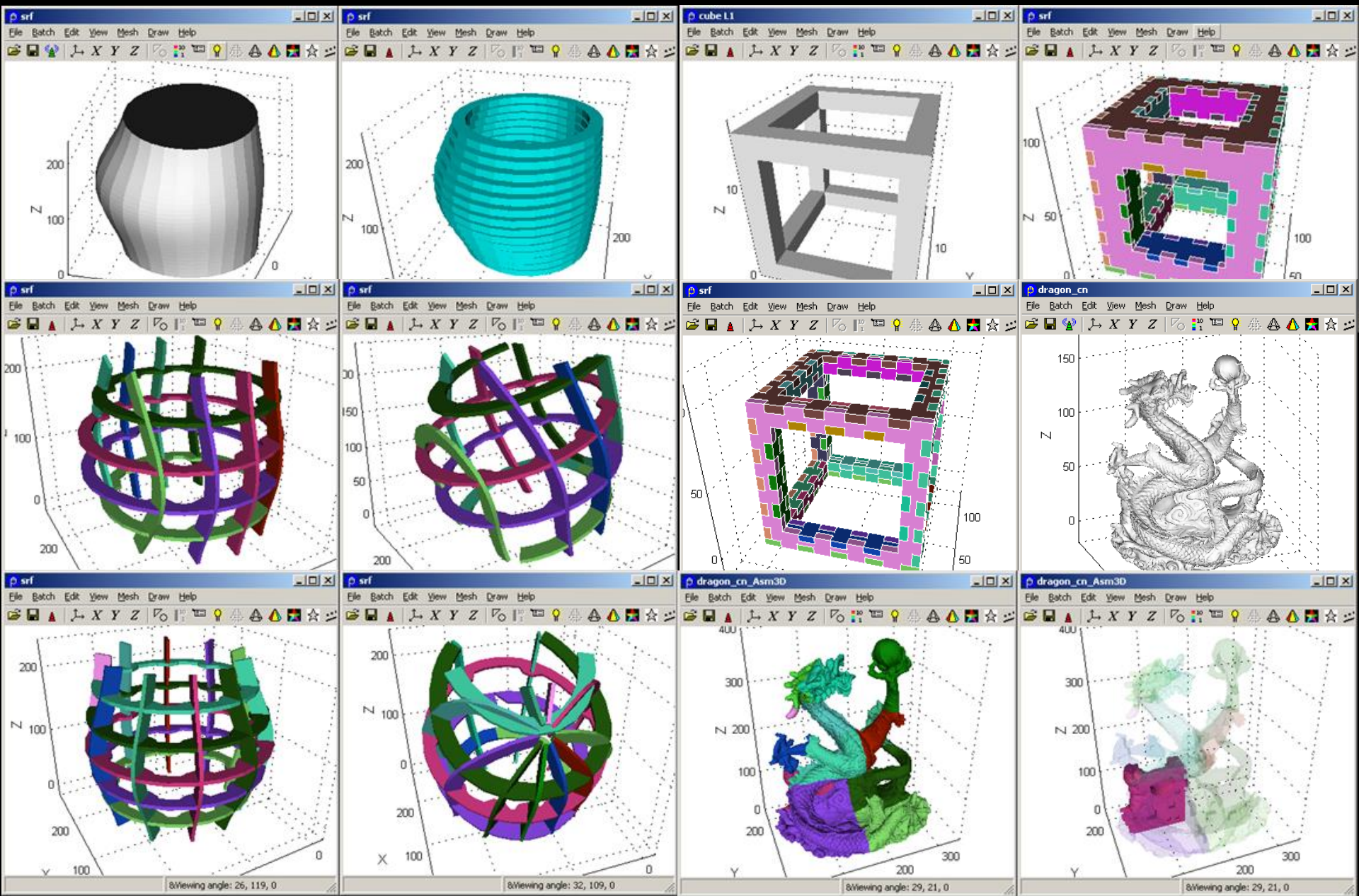
Automatic model generation

Large-scale rapid prototyping

User-friendly interface

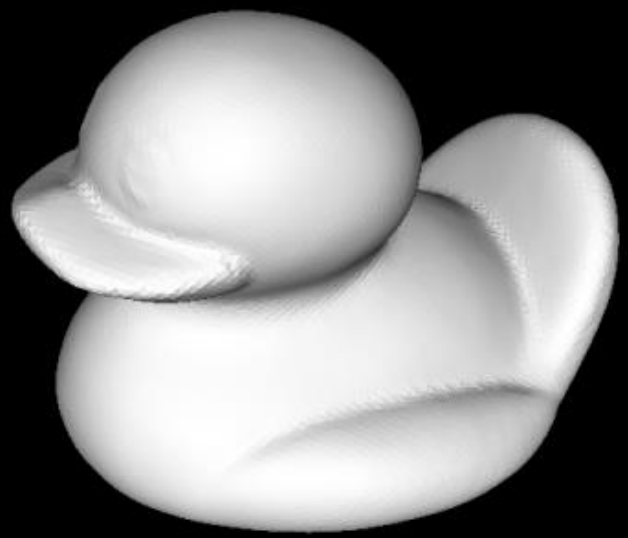
C++ SDK library support

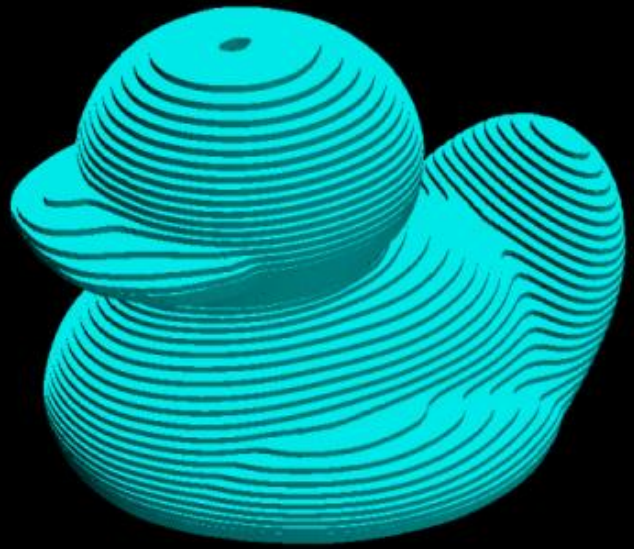
Summary

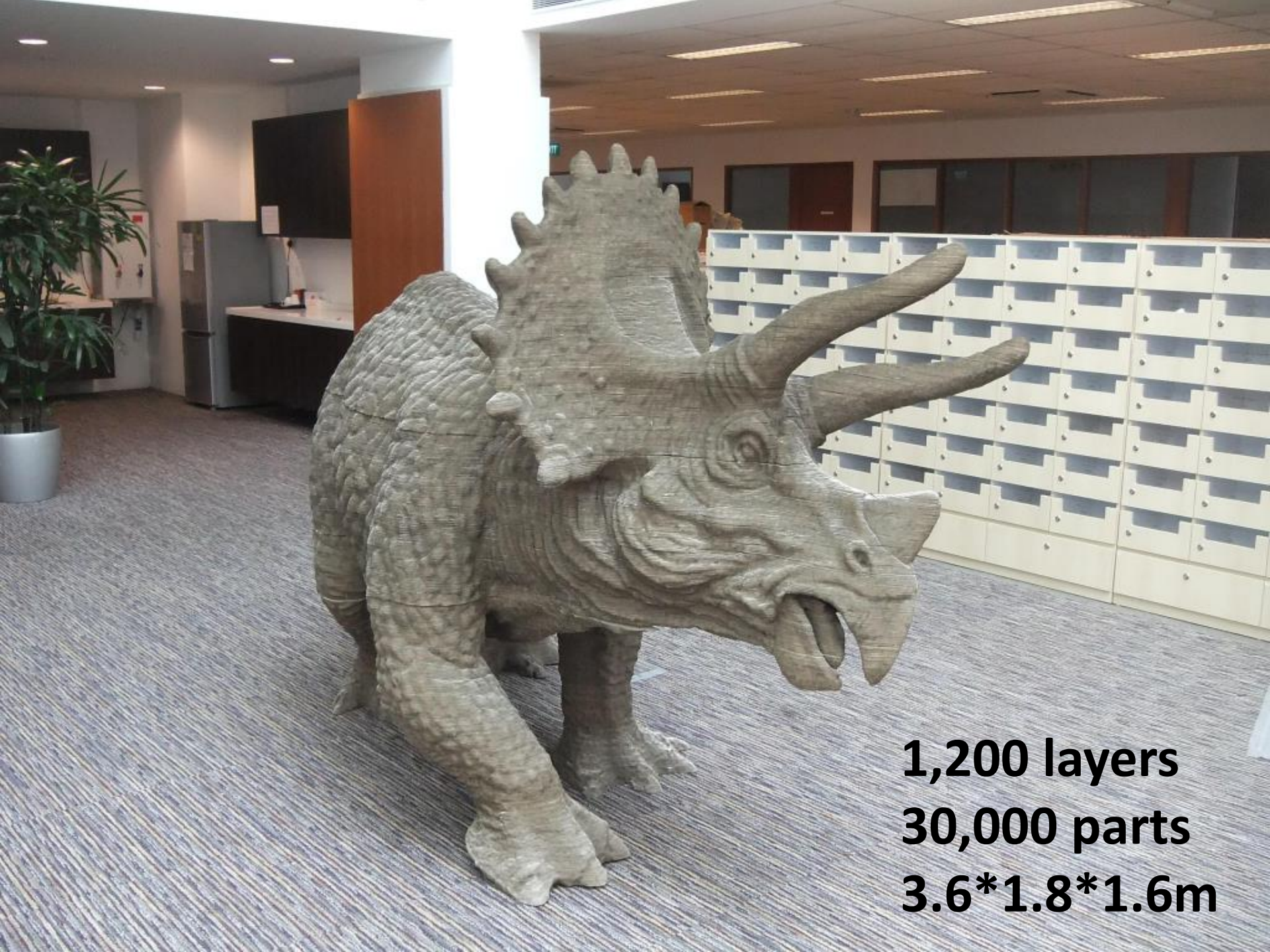

srf
cube L1
dragon_cn
dragon_cn_Asm3D
File Batch Edit View Mesh Draw Help
&Viewing angle: 26, 119, 0
&Viewing angle: 32, 109, 0
&Viewing angle: 29, 21, 0
&Viewing angle: 29, 21, 0

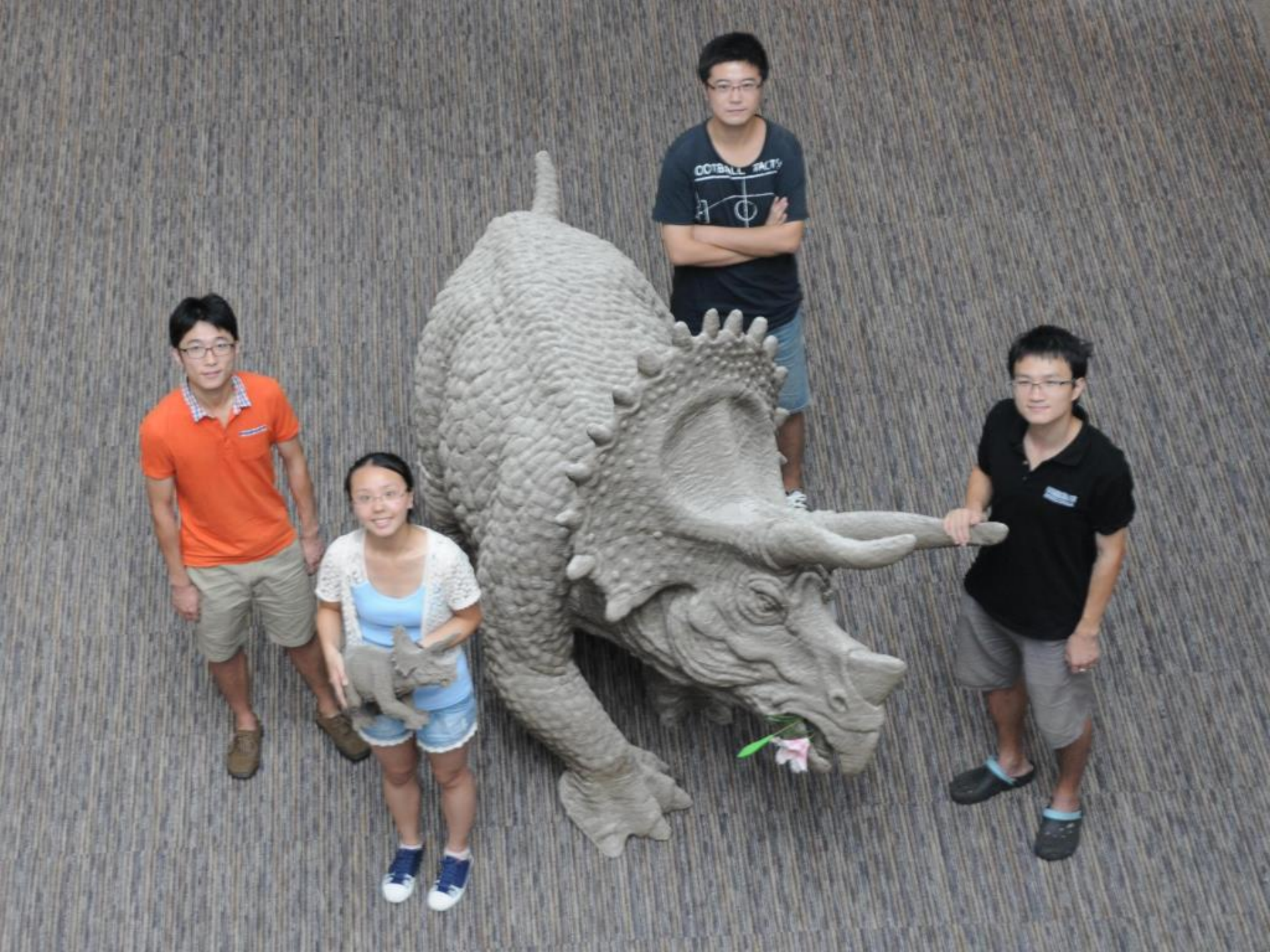
Case Study

Stack Model






1,200 layers
30,000 parts
3.6*1.8*1.6m

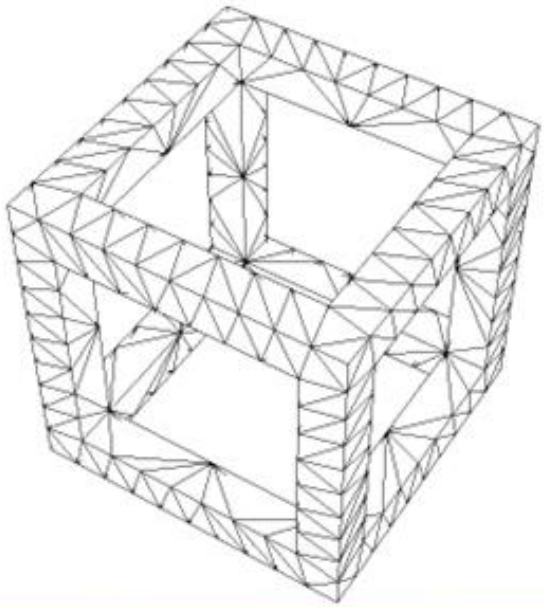


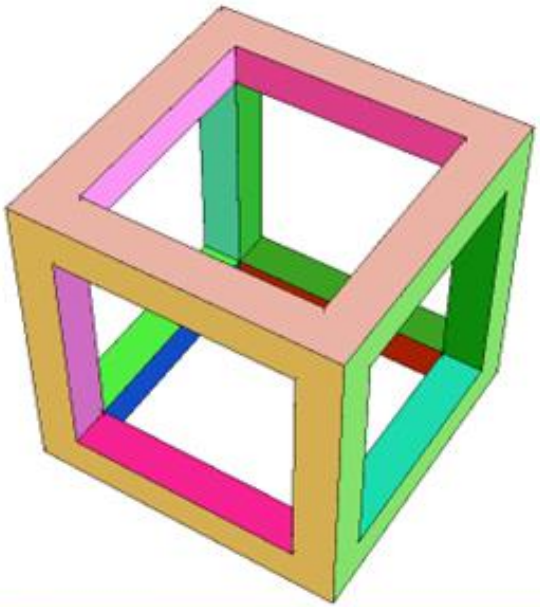
Case Study

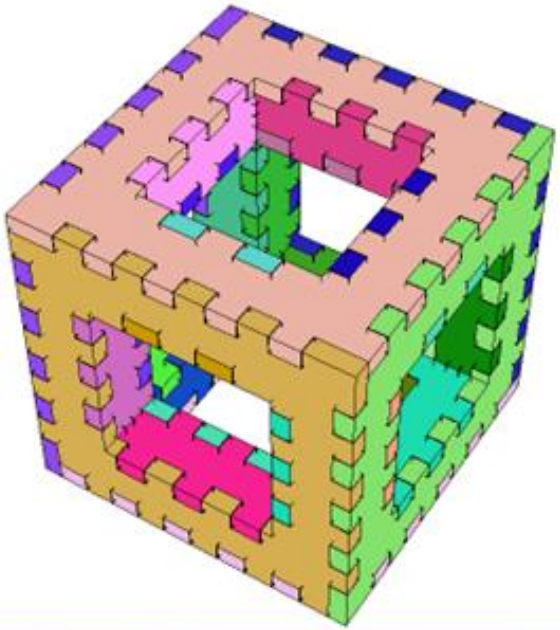
Interlocked Model

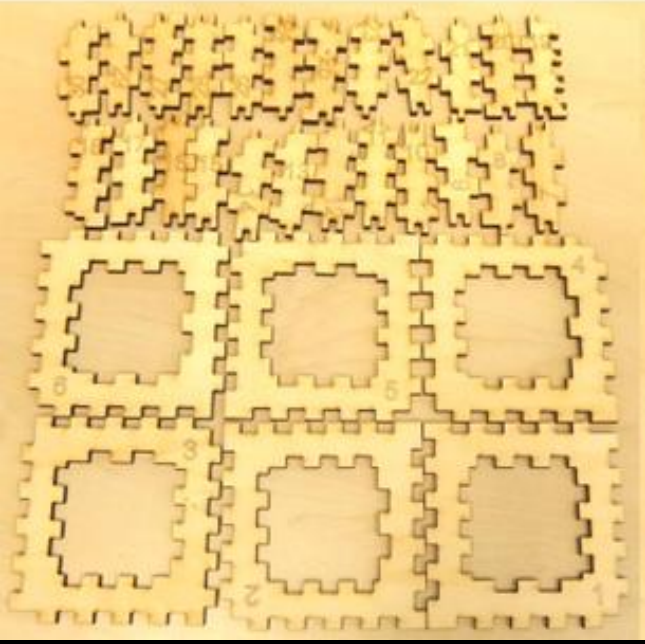
Case Study

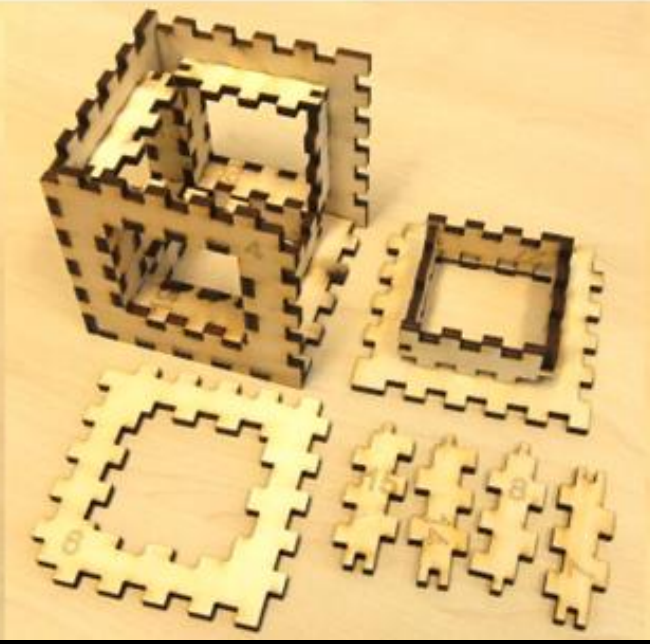
Finger Joint Model

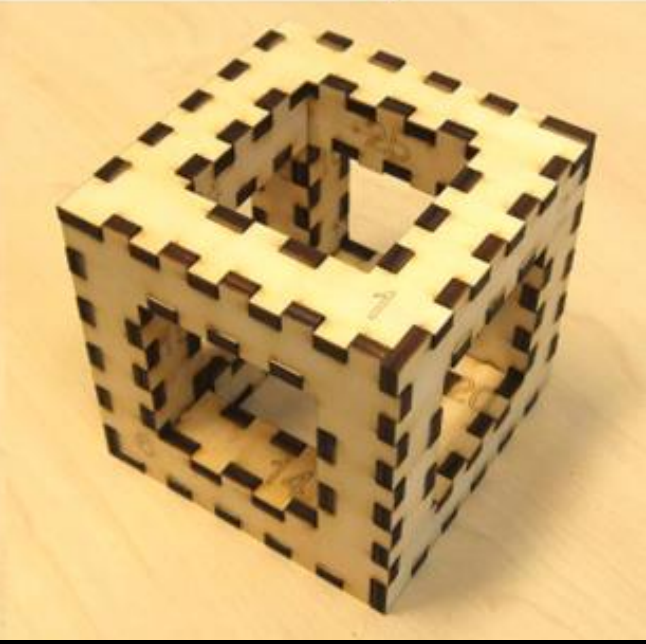


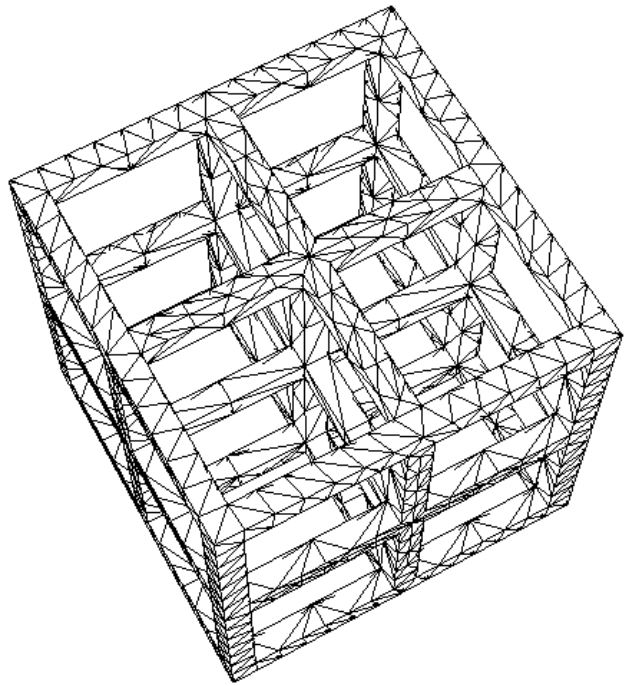


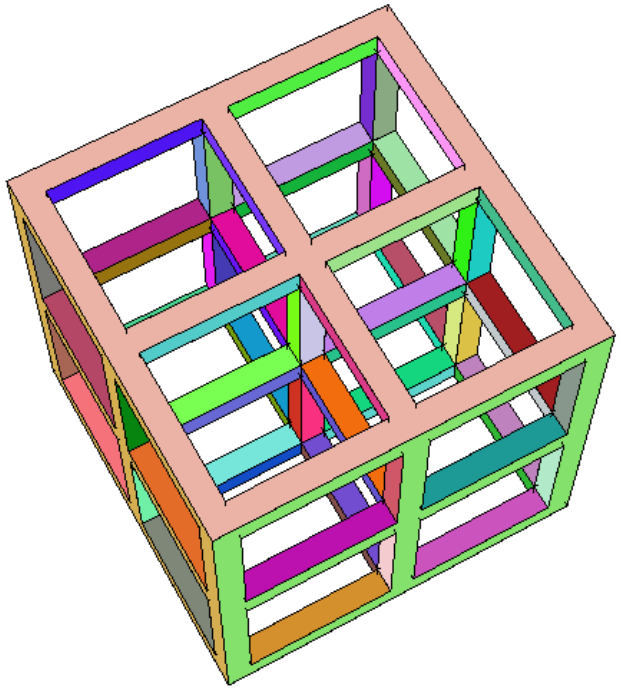


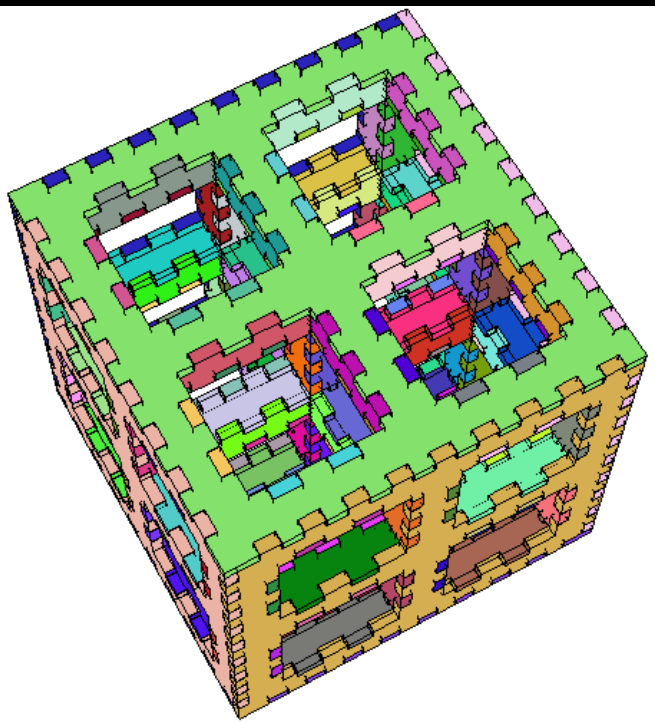


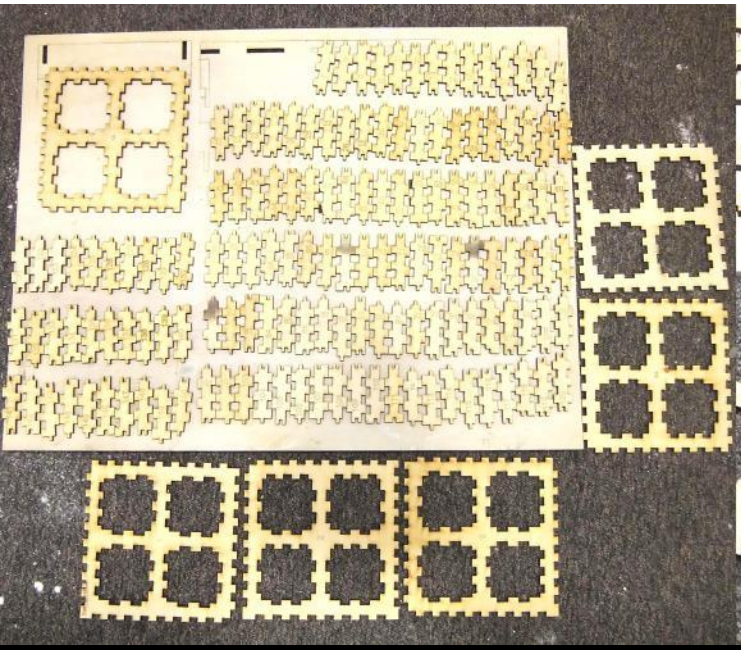


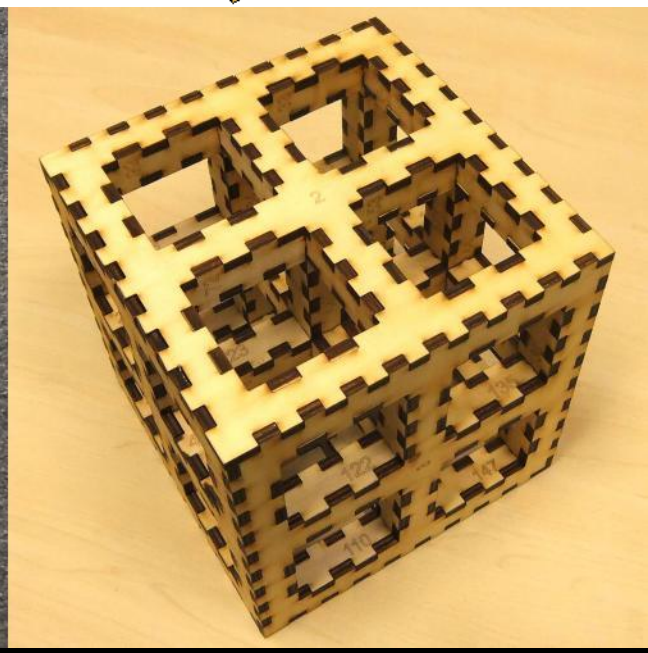


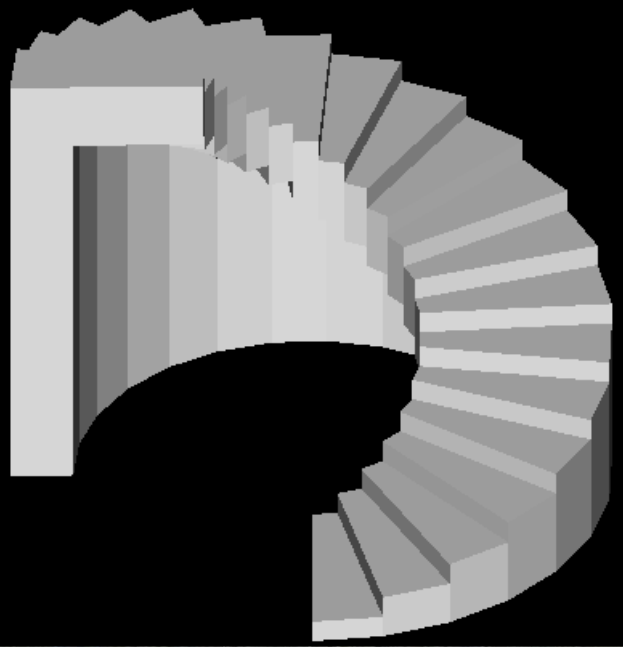


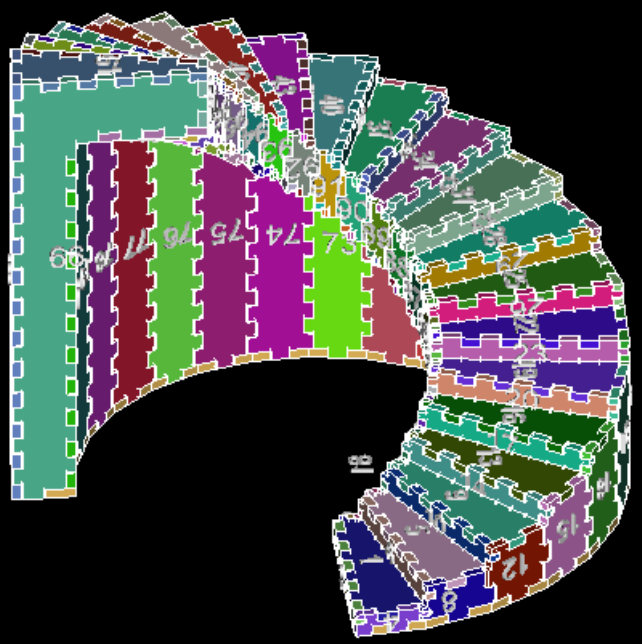


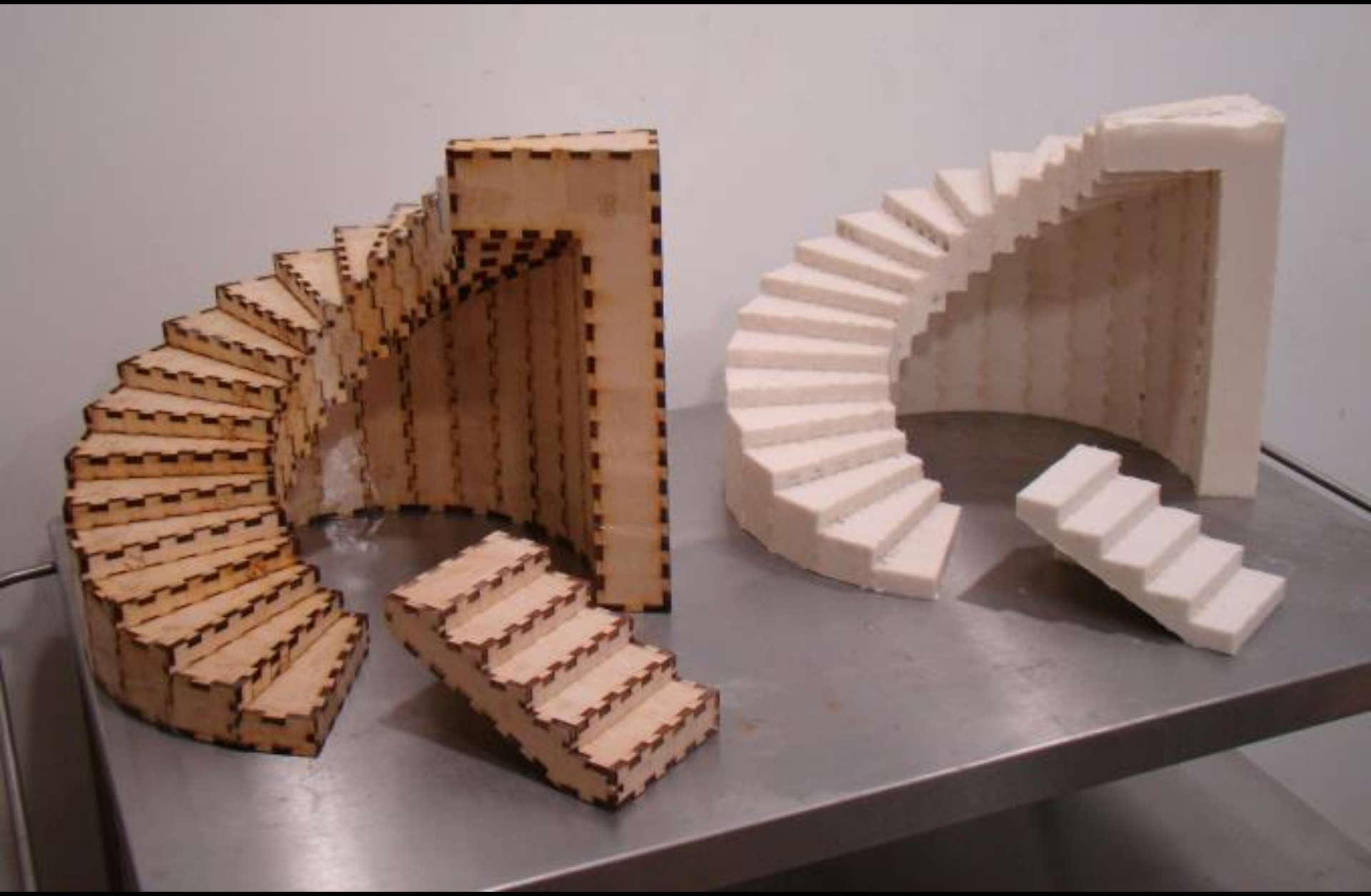






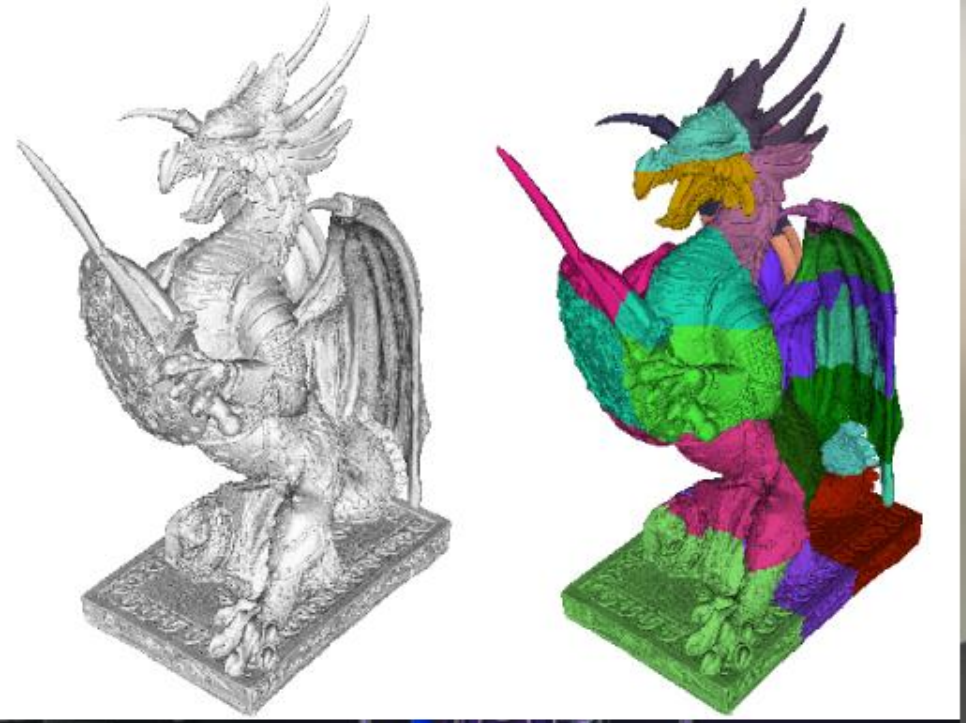


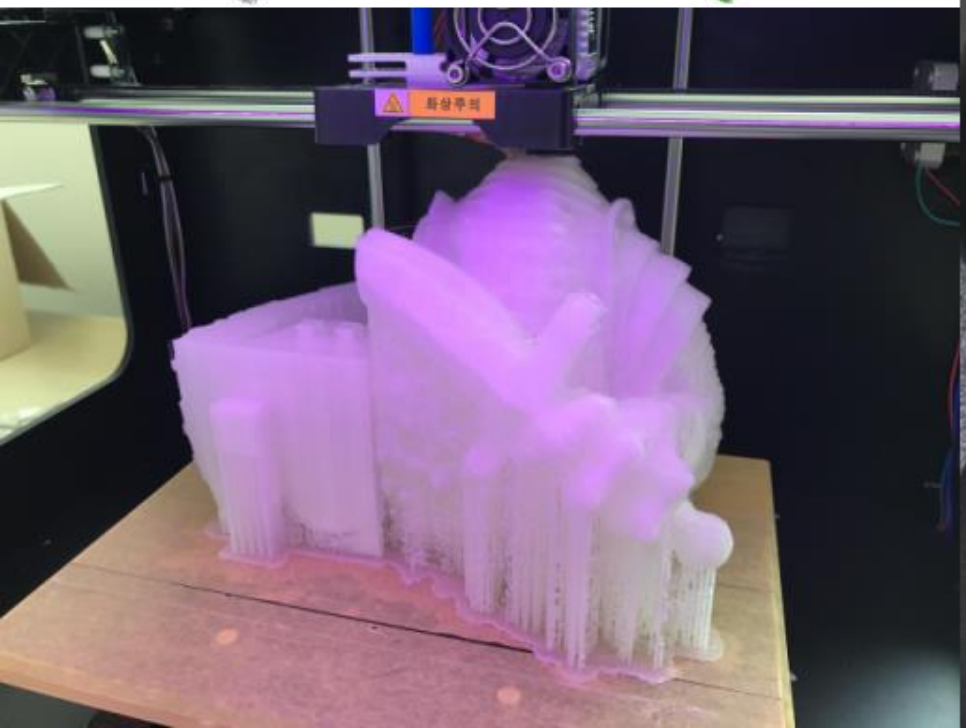




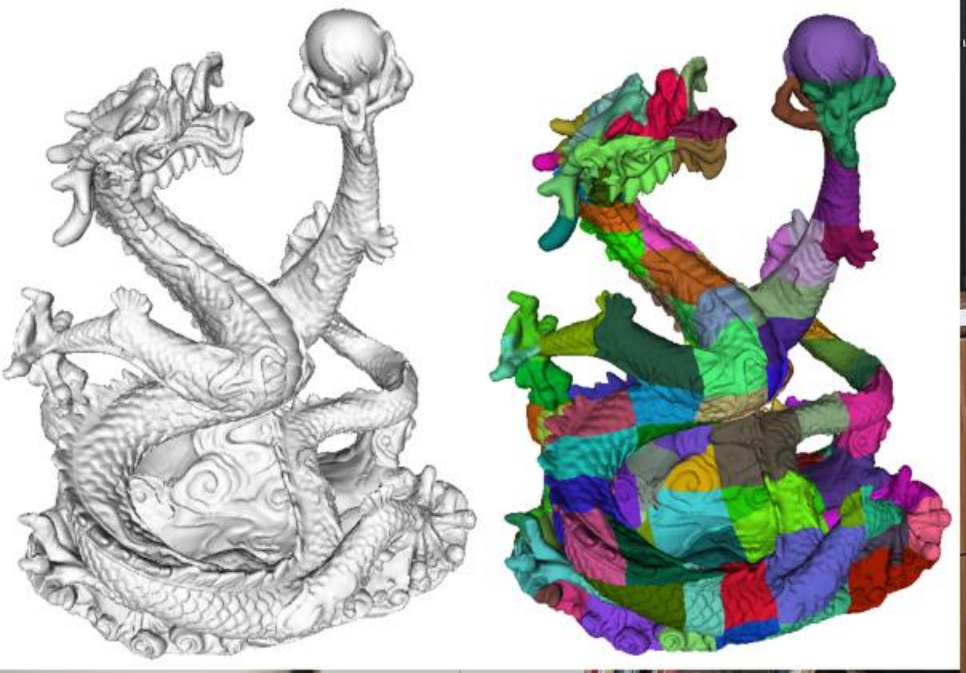
Case Study

3D Printed Model





0.5m tall



129 parts

EDISON

1.0m tall
EDISON