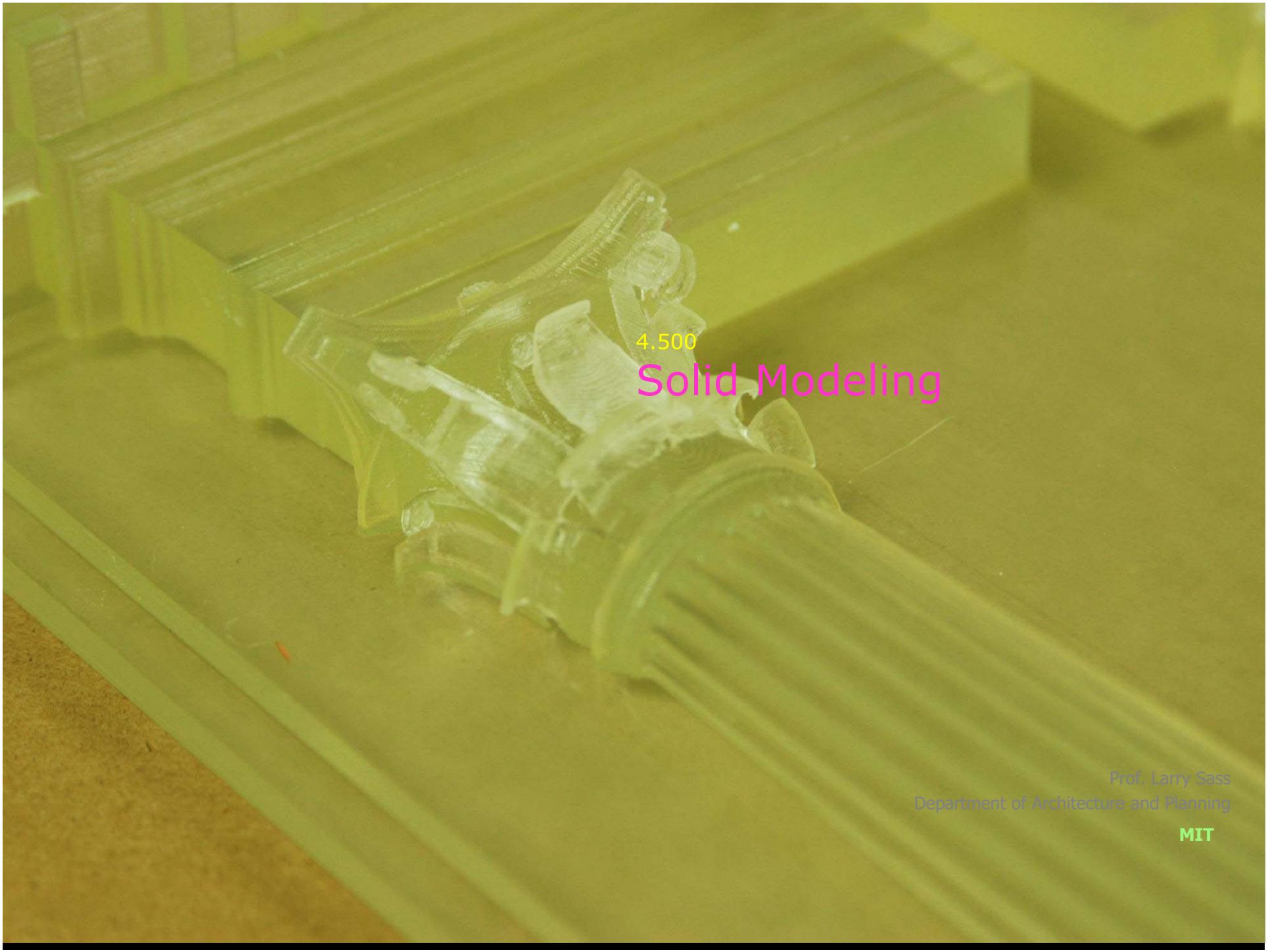
4.500 Introduction to Design Computing
Fall 2008



4.500

Solid Modeling

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Department of Architecture and Planning
MIT

Lecture 2

[1] Computer Modeling

[2] Solid Modeling Operations

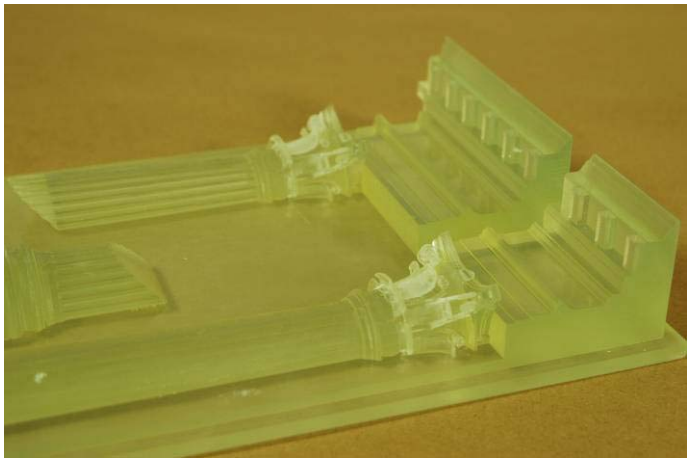
[3] Background

[4] Modeling Functions

[5] Homework

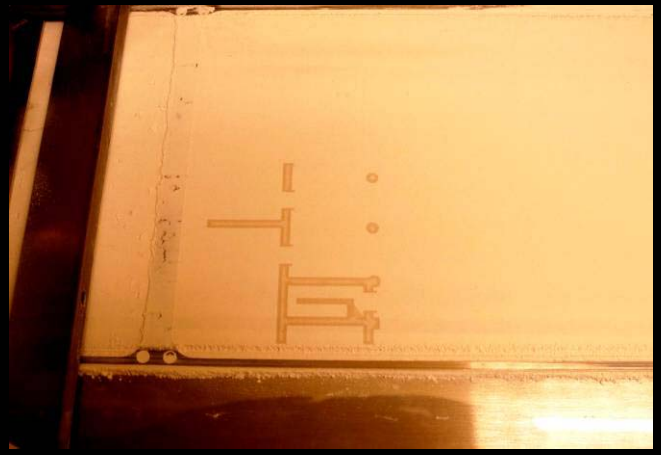
[1]
Modeling

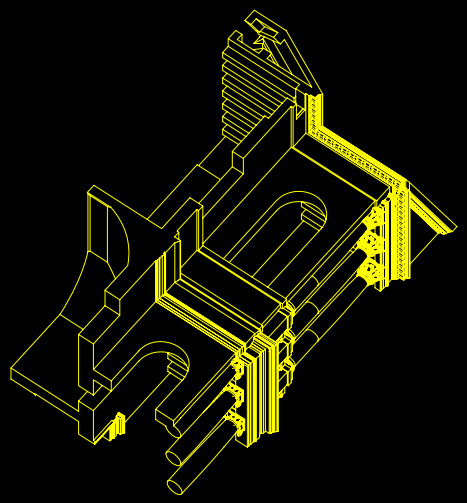
Solid Modeling



- Stereo Lithography
- 3D Printing
- FDM Printing

3d Printing

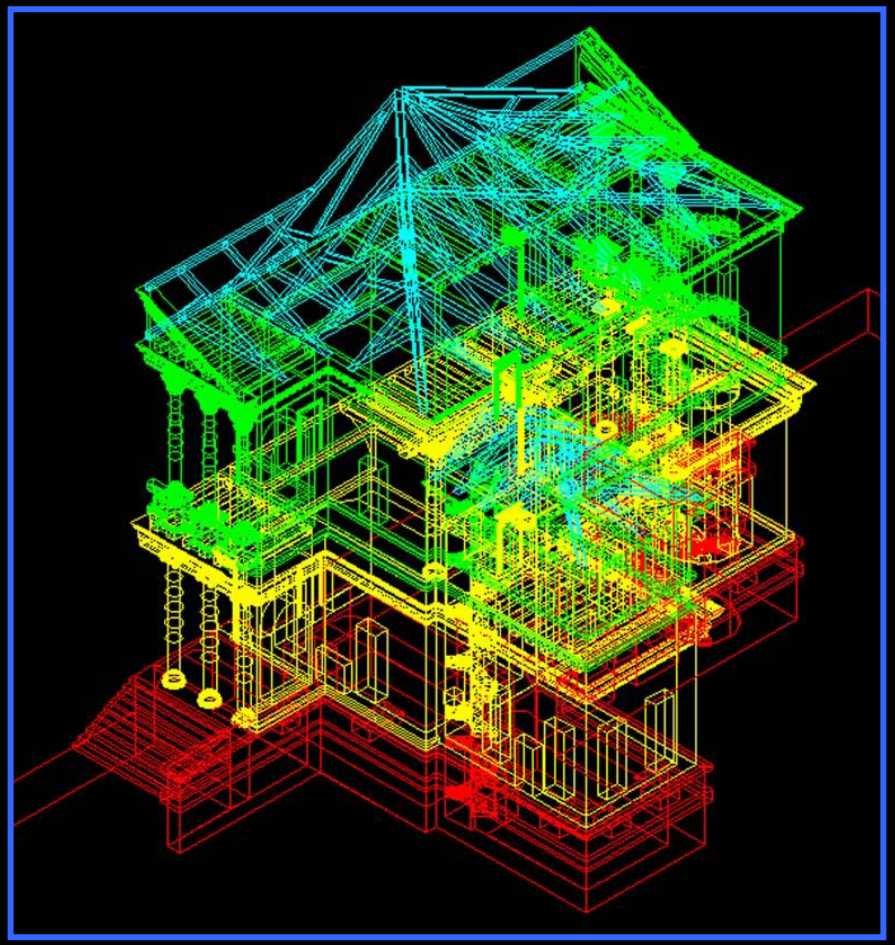




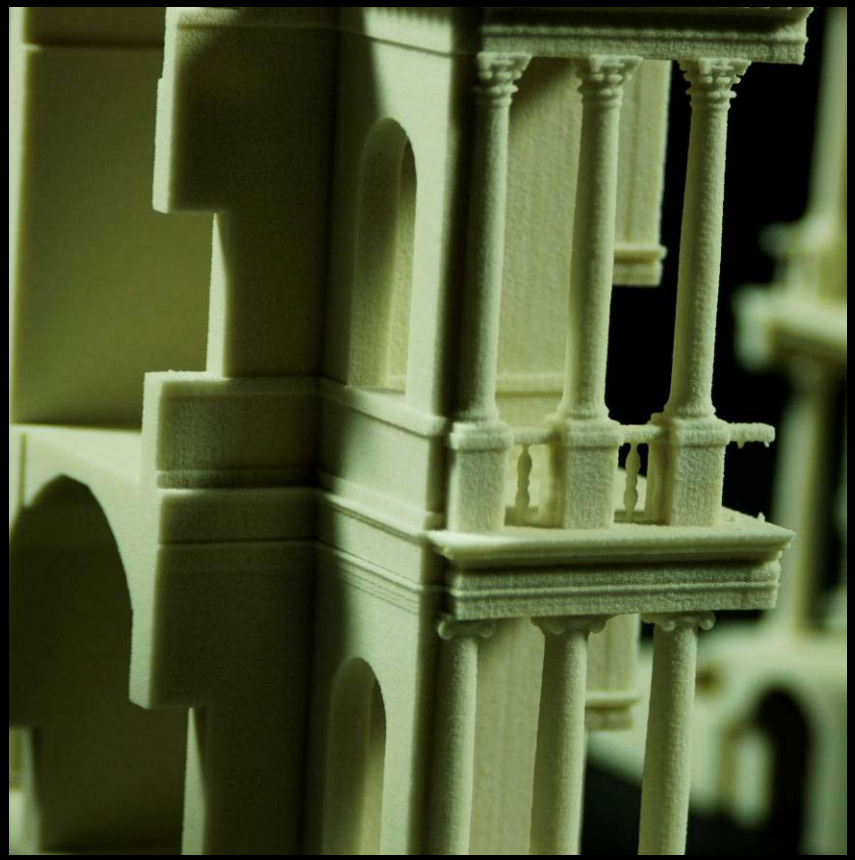
Types of Solid Models

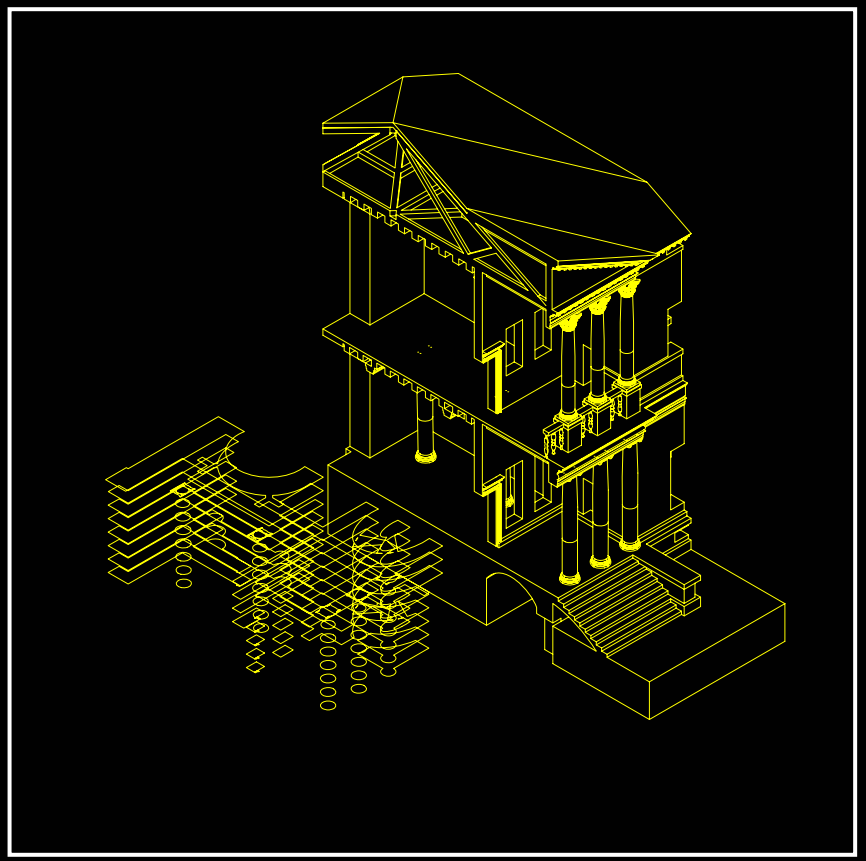
- Solid Models

- Surface Models

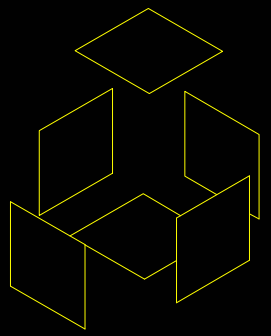


Types of Solid Models

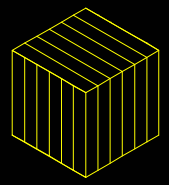




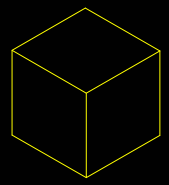
Types of Representation



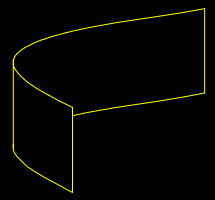
Surface Models



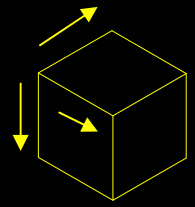
Ruled Surface



Solid Modeling

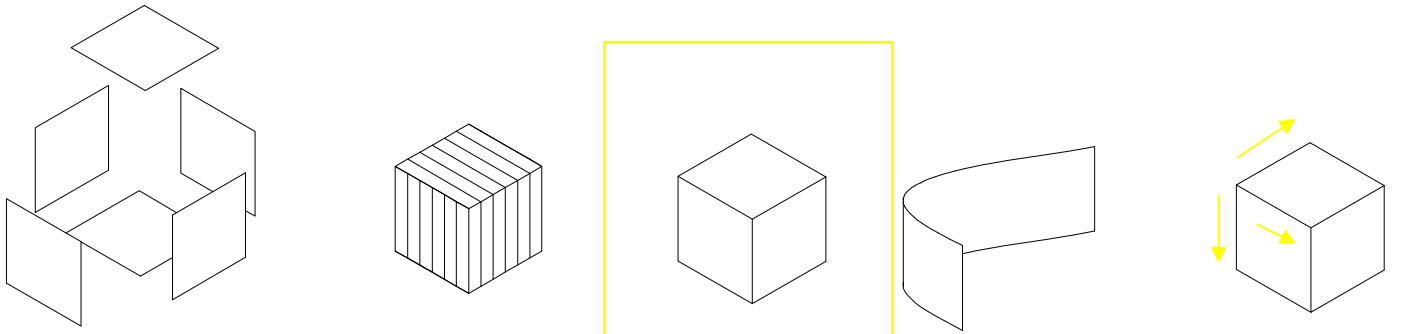


NURB Surface Modeling



Parametric Modeling

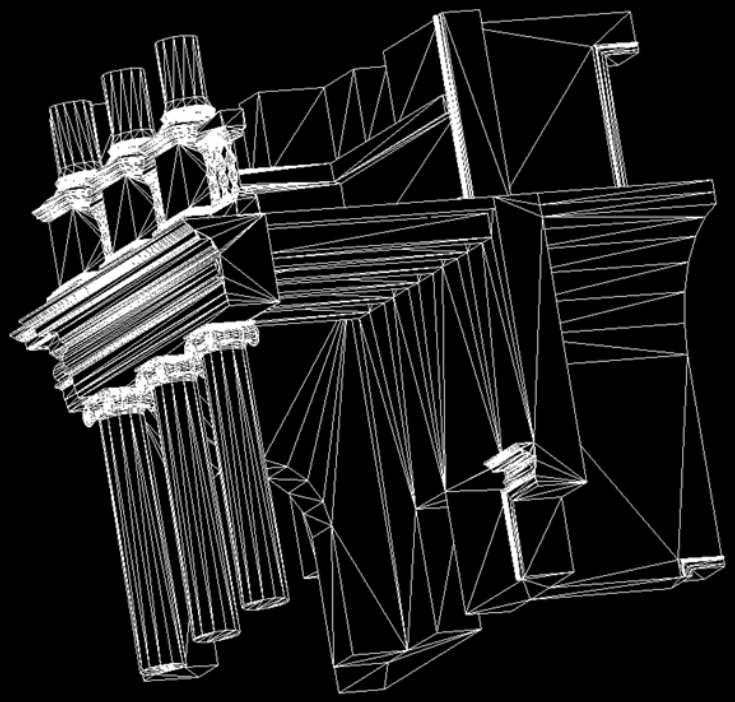
Types of Representation



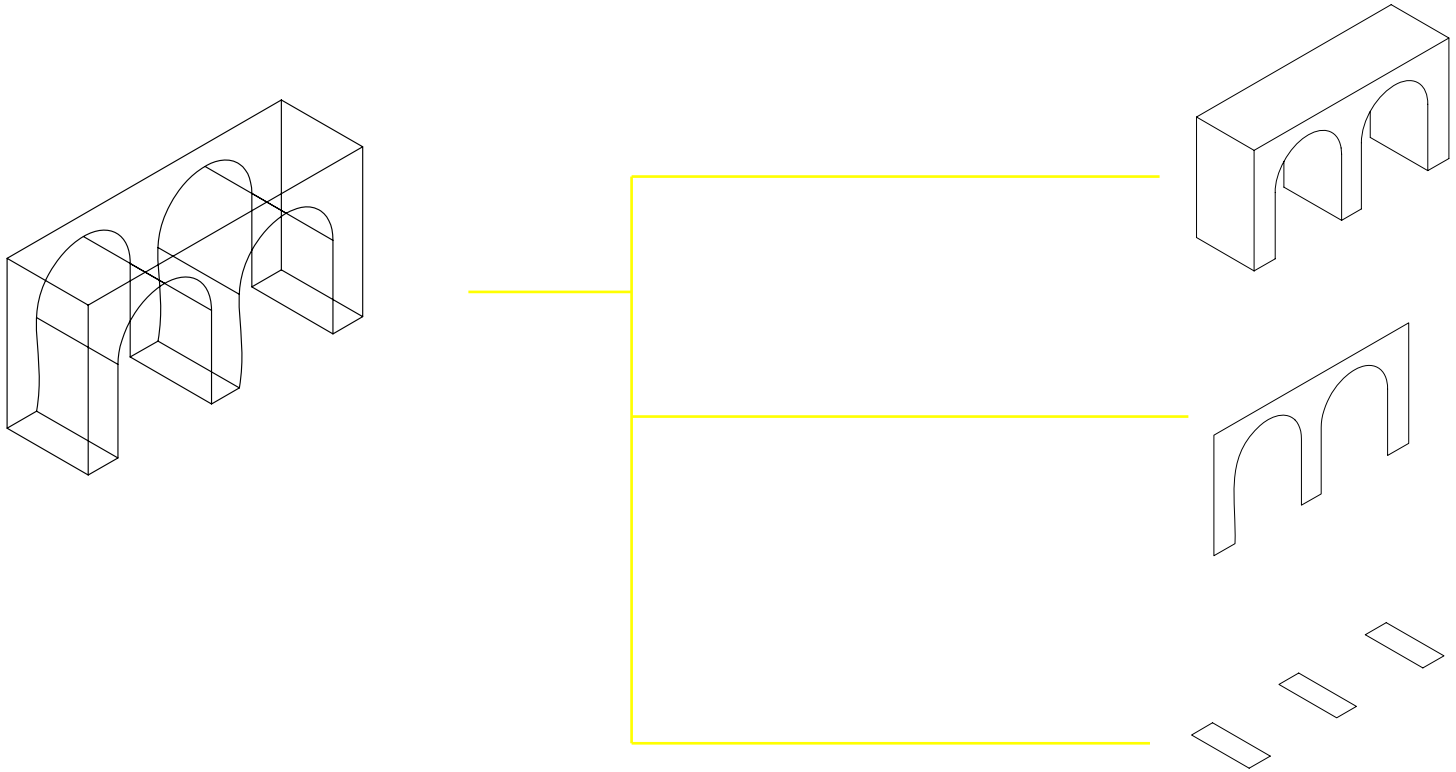
Surface Models | Ruled Surface | Solid Modeling | NURB Surface Modeling | Parametric Modeling

[2]
Solid Modeling

Surface Modeling



Solid Modeling



[3]
Background

History of Solid Modeling

- Computer Models were used in Architectural Research in – 1980s
- Computer Models used to create renderings – 1990s
- Computer Models will be used a the building source – 2000 – 2015

[4]
Modeling Functions