

CSYE 7270

Building Virtual Environments

Create a 3D Model

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Create a 3D Model

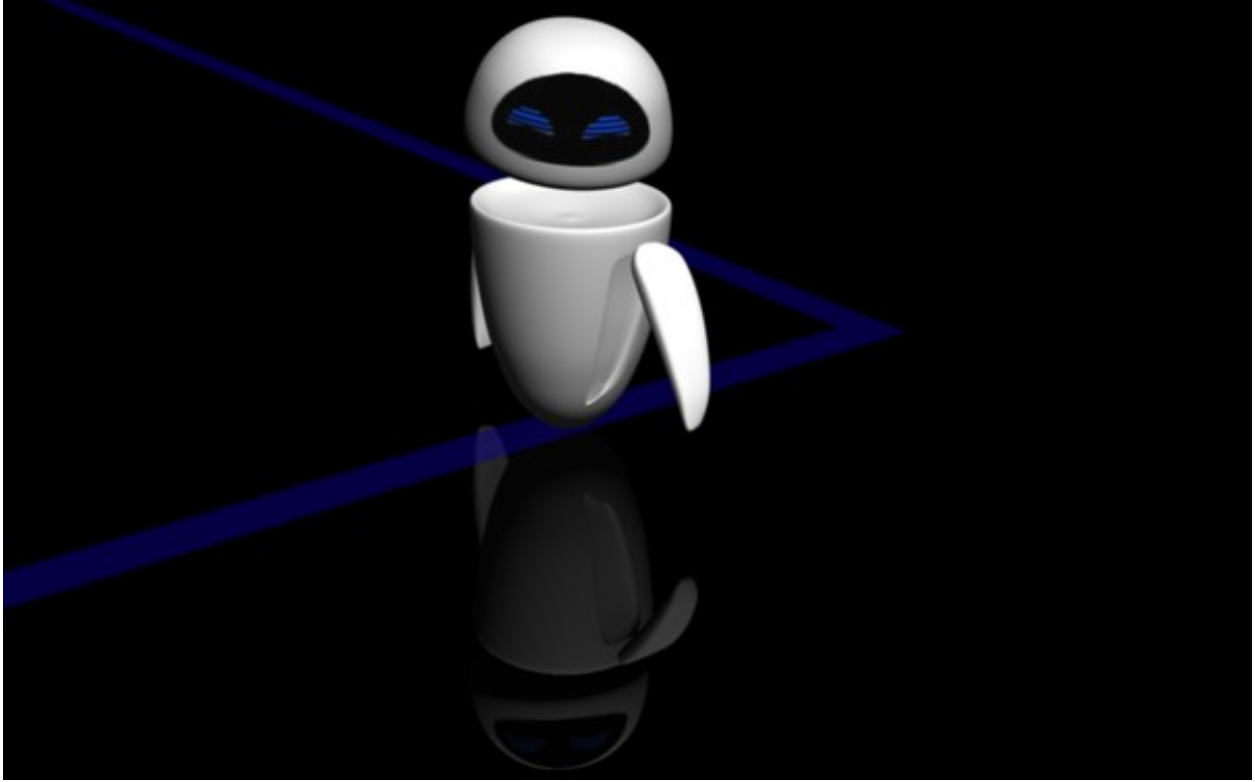
Counts towards assignment score

Part 1 – (100 Points) Create a 3D Model

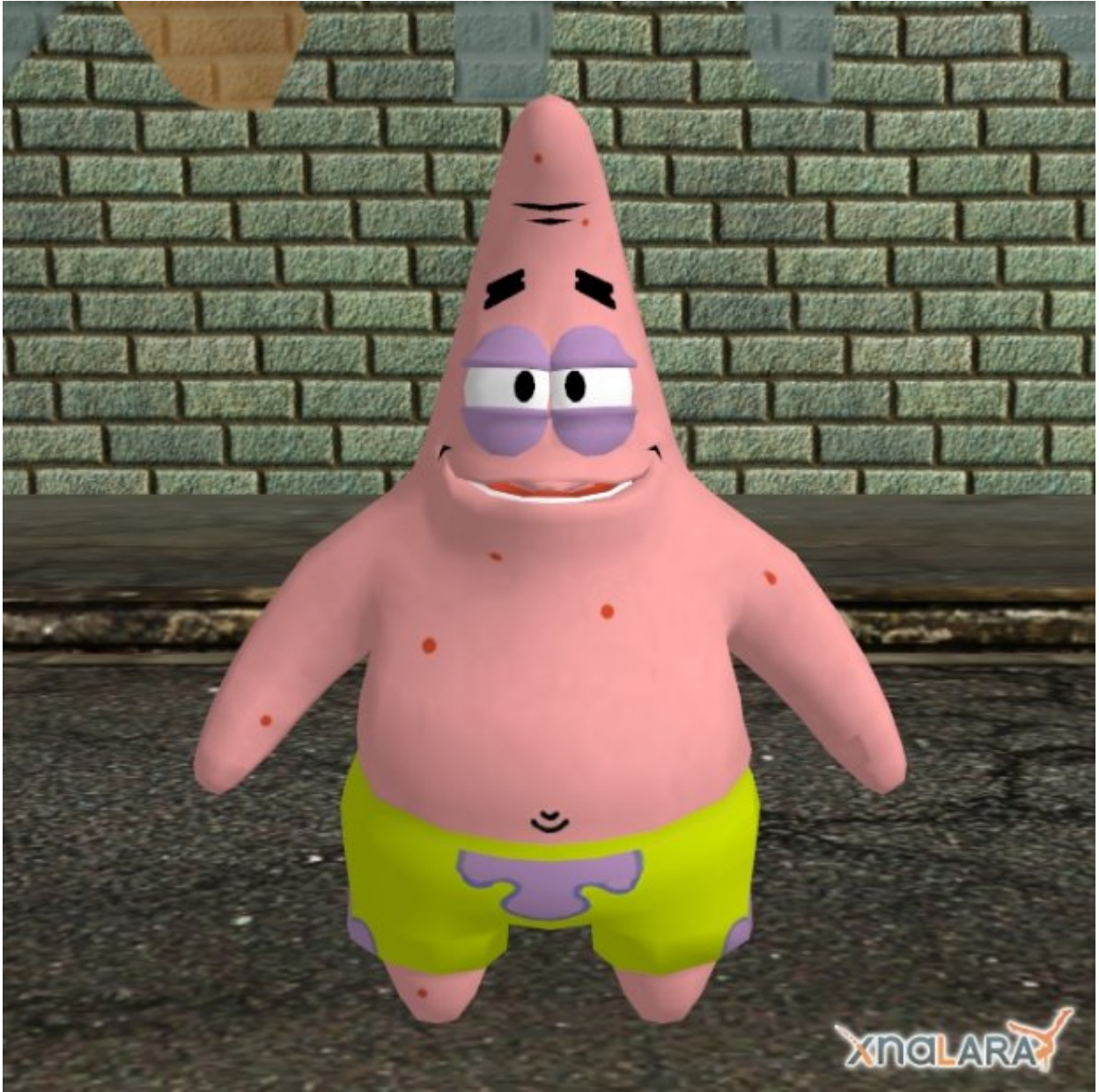
Create a 3D Model. Apply at least 2 shaders/textures to the model. Upload the model to Blackboard along with the images from renders from at least 3 distinct camera angles with and without shaders/textures.

You can build a model from scratch or tweak an existing model. If you tweak an existing model you must provide the base model, reference it and provide additional renders that illustrate the tweaks/changes made.

Examples of 3D Models that aren't "Too Simple"

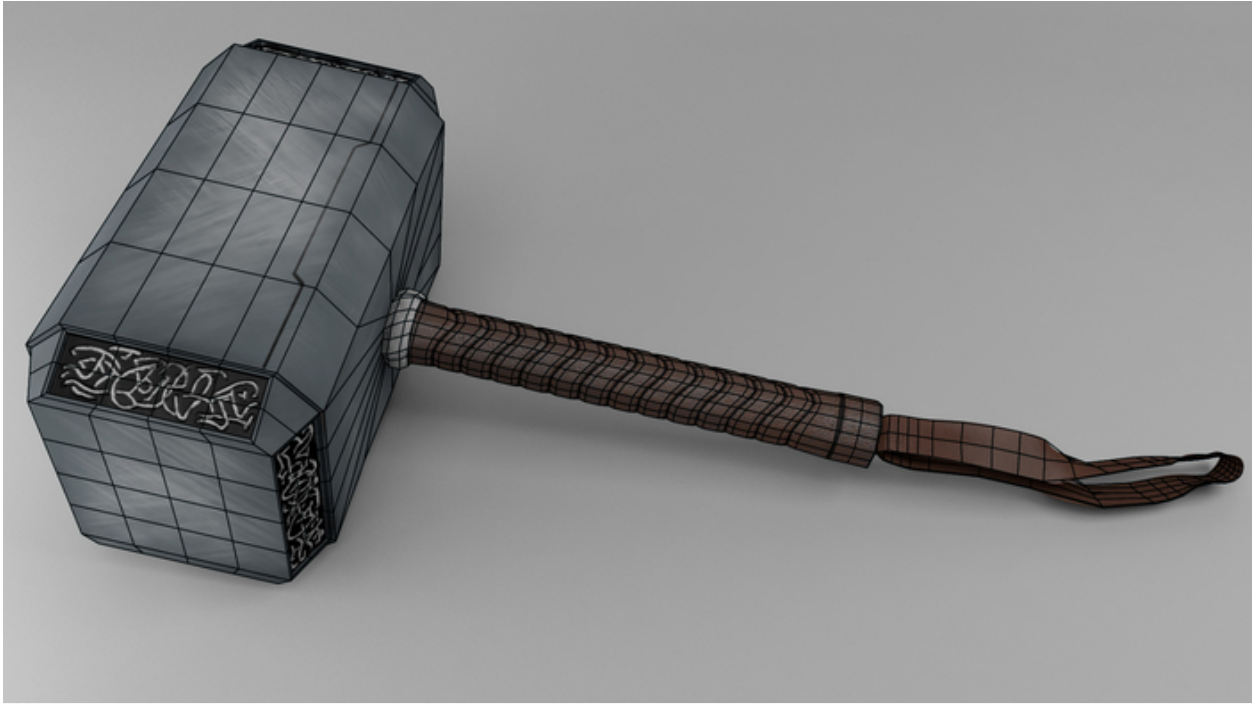




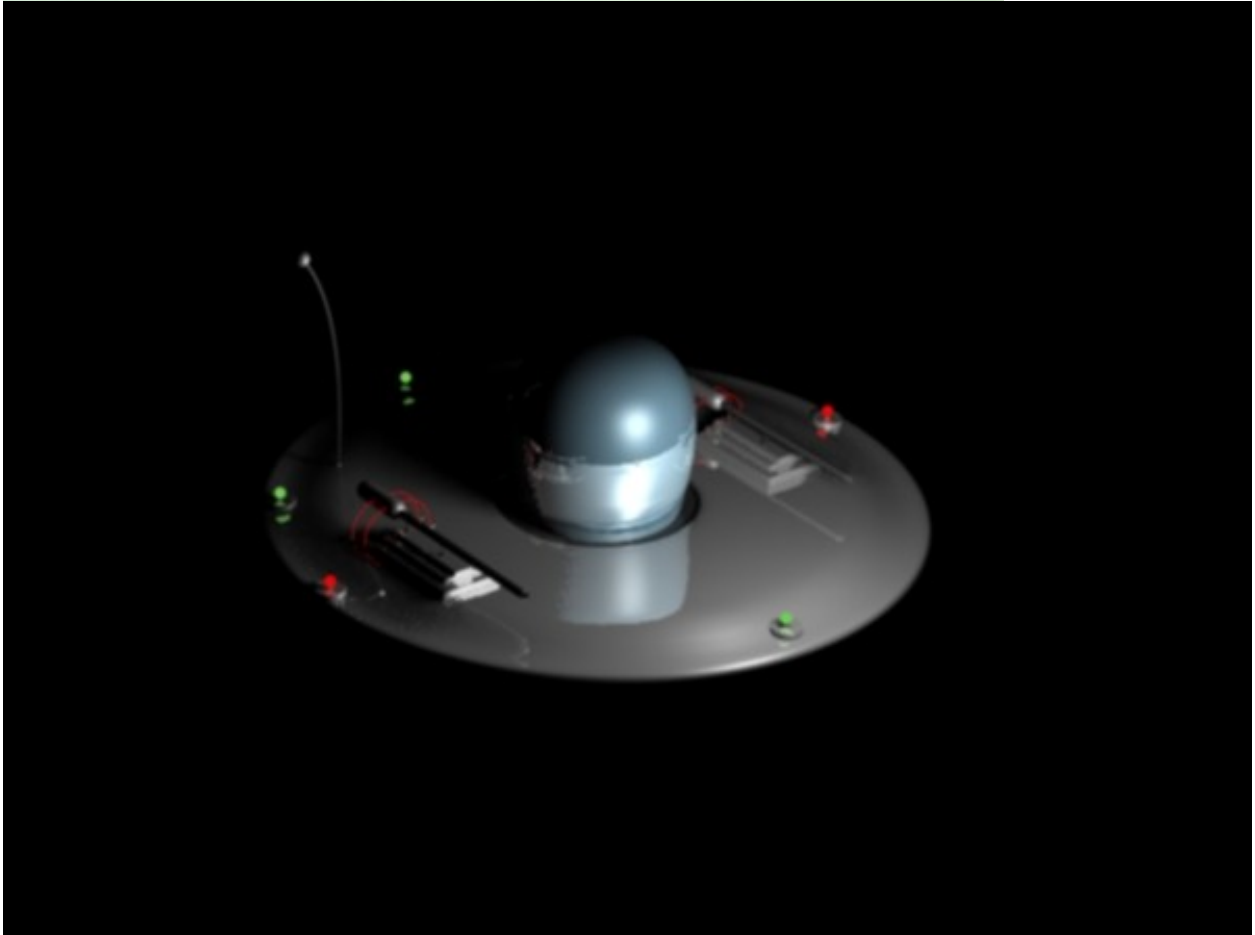
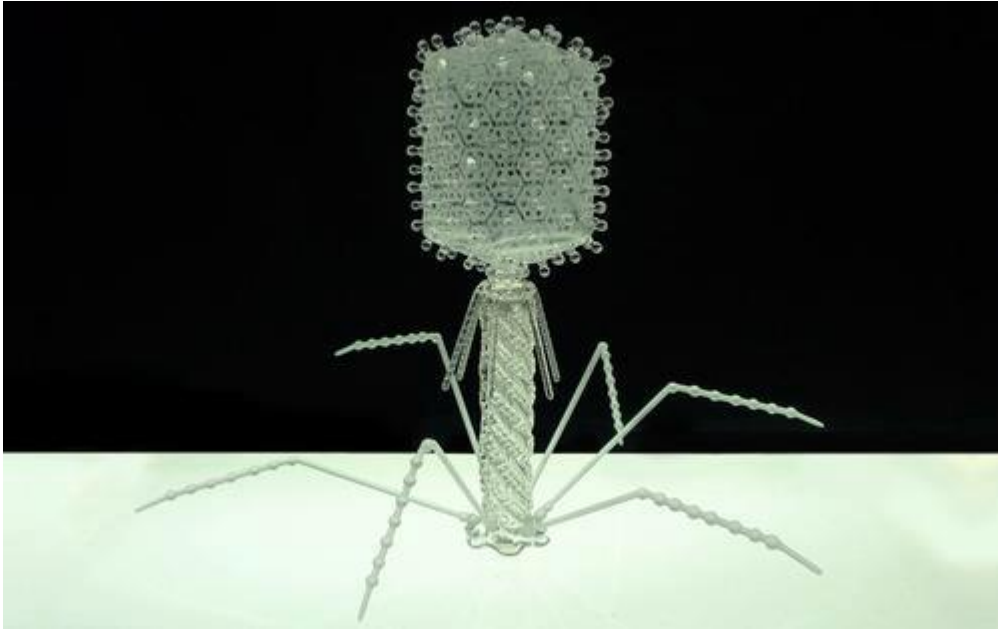


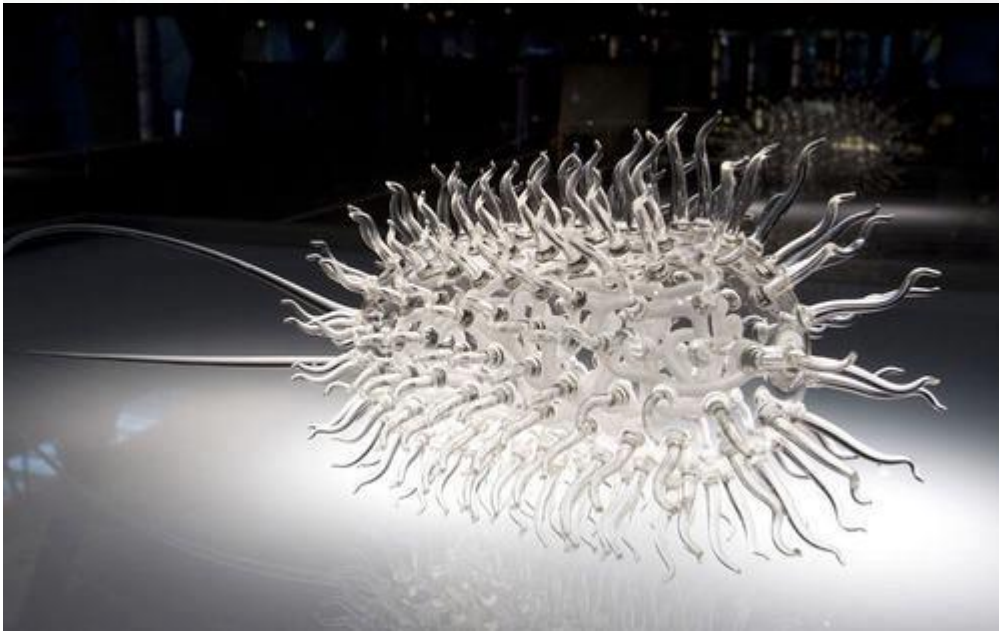


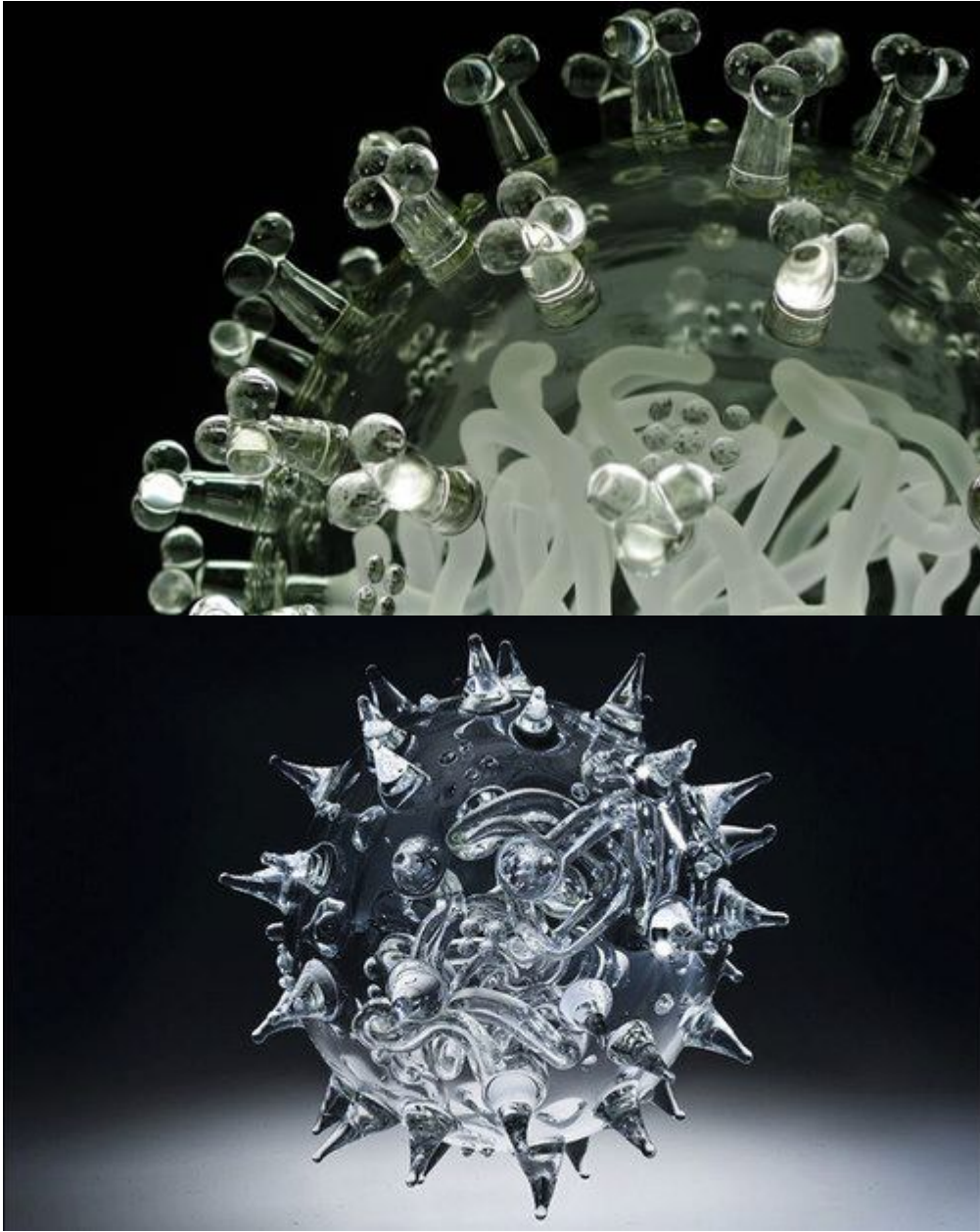














3D Printing Contest

I'll pay to 3D print the best model, if it is printable and the student desires a 3D print of their model. There is a \$50 limit on the print cost.

Scoring Rubric

100 points possible

| Requirement | Points |
|---|--------|
| Greater than 1000 polygons | 50 |
| Renders from at least 3 distinct camera angles. | 25 |
| 2 shaders/textures | 15 |
| Artistic merit | 10 |

Submission

You will submit your assignment via BlackBoard.

Click the title of assignment (blackboard -> assignment -> <Title of Assignment>), to go to the submission page.

3D Modeling Resources.

Maya Essentials 2: Polygonal Modeling Techniques with George Maestri

<http://www.lynda.com/Maya-tutorials/Maya-Essentials-2-Polygonal-Modeling-Techniques/96715-2.html>

Game Character Creation in Maya with Chris Reilly

<http://www.lynda.com/tutorials/Game-Character-Creation-in-Maya/83095-2.html>

Modeling Vehicles in Maya with Ryan Kittleson

<http://www.lynda.com/Maya-tutorials/Modeling-Vehicles-Maya/114004-2.html>

Character Animation Fundamentals with Maya with George Maestri

<http://www.lynda.com/Maya-tutorials/Character-Animation-Fundamentals-with-Maya/54994-2.html>

Working with HumanIK Rigs in Maya with Adam Crespi

<http://www.lynda.com/Maya-tutorials/Working-Human-IK-rigs-Maya/122440-2.html>

Maya Essentials 5: Animation Tools with George Maestri

<http://www.lynda.com/Maya-tutorials/Maya-Essentials-5-Animation-Tools/96719-2.html>

Facial Modeling Timelapse <http://www.sergicaballer.com/facial-modeling-timelapse/>

Nice sources of 3D Models

<http://rigging101.com/>

<http://tf3dm.com/>

<http://www.creativecrash.com/>

<http://www.turbosquid.com/>

http://www.turbosquid.com/Search/?keyword=ufo&sort_column=A5&sort_order=asc

http://www.turbosquid.com/Search/Index.cfm?keyword=rocket&sort_column=A5&sort_order=asc

http://www.turbosquid.com/Search/Index.cfm?keyword=robot&sort_column=A5&sort_order=asc

SpringerLink Books

Understanding 3D Animation Using Maya

Authors: John Edgar Park <http://link.springer.com/book/10.1007/b138279>

Principles of Computer Graphics Theory and Practice Using OpenGL and Maya®

Authors: Shalini Govil-Pai

<http://link.springer.com/book/10.1007/b135398>