

University of British Columbia CPSC 314 Computer Graphics Jan – Dec 2017

Michiel van de Panne



[BabyX, Univ Auckland]



[http://www.cgsociety.org/index.php/cgsfeatures/ cgsfeaturespecial/building_3d_with_ikea]

http://www.ugrad.cs.ubc.ca/~cs314

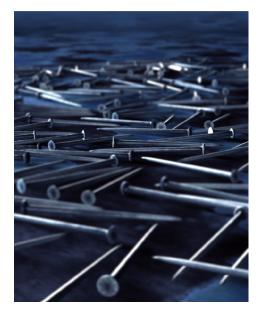
Real or CG?

http://area.autodesk.com/fakeorfoto





Real or CG?

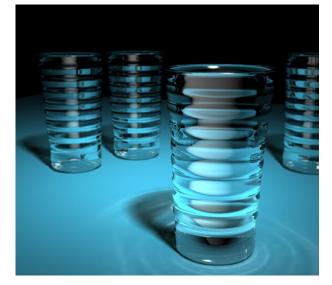


3

Real or CG?



2



4

Real or CG?







Applications of Graphics

- film & visual effects
- virtual reality
- games
- training simulators
- Google Earth, Streetview, ...
- IKEA catalog
- • • •

7

Topics



2D imaging



animation



modeling



rendering

9

Other Topics

- colour perception
- novel interface design "imagination amplification"
- 3D printing
- computational photography
-

Applications, APIs, and Theory

focus is on theory + some API knowledge



WebGL

- · this is a graphics course that uses WebGL
 - not a course *on* WebGL
- some lecture coverage of:
 - javascript (survey?)
 - WebGL
- three.js
- possibly one assignment in C++

Administrivia

- course web page
- lectures, in-class notes
- discussion: Piazza
- grading
 - assignments: theory + coding
 - participation: worksheets, pre-class prep
 - two midterms
- late days
- lab

13

Other Graphics Courses

- CPSC 424: Geometric Modeling (next year)
- CPSC 426: Computer Animation (this term)
- CPSC 526: Computer Animation
- CPSC 524: Computer Graphics: Modeling
- CPSC 547: Information Visualization (this term)

Next class

- Math review
- Homework
 - Piazza account
 - play with three.js examples