



CAREER

IN COMPUTER GRAPHICS

LECTURE BY *Jason*

CHEMISTRY

PHYSICS

ELECTRICAL ENG.

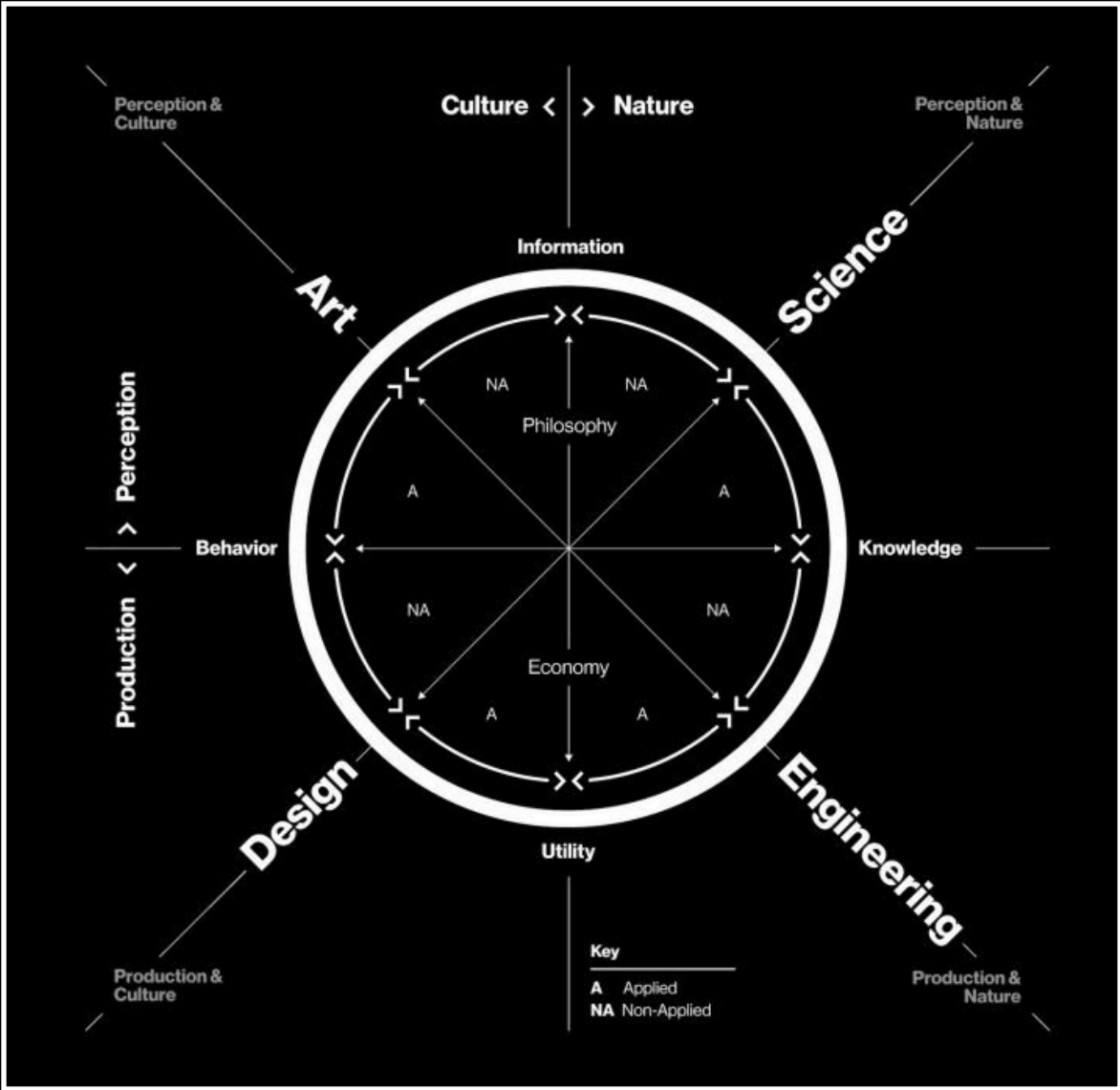
COMPUTER SCIENCE

COGNITIVE SCIENCE

VIRTUAL REALITY

GAMING

CLOUD COMPUTING



INORGANIC CHEMISTRY

https://www.youtube.com/watch?v=C-Zkw_7DEDk

MODERN DISPLAY SYSTEMS

<http://elen4193lab.weebly.com/>

UNITED NATIONS SOCIAL GOOD SUMMIT

<https://www.youtube.com/watch?v=0lwG6MfGvwI>

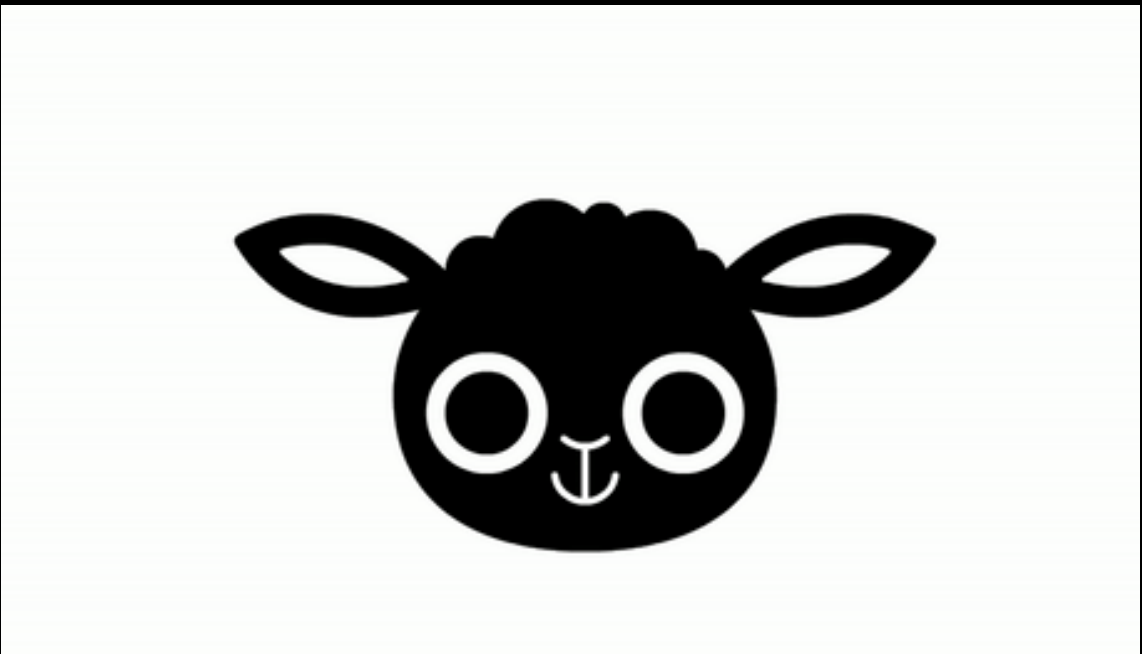
PAST PROJECTS_

<https://www.jpl.nasa.gov/news/news.php?feature=7249>

<https://www.youtube.com/watch?v=kJtUwrUh4xs>

<https://www.intel.com/content/www/us/en/internet-of-things/videos/realsense-range-rover-features-video.html>

CURRENT PROJECT_



SIDE HUSTLE_

<https://poly.google.com/user>

Computer graphics deals with all aspects of creating images with a computer

“It’s the ultimate LEGO kit since you can build anything and change it on the fly!”

“3D is like a printer for the brain. You get your ideas out of your head and it’s awesome!”

APPLICATION

SOFTWARE

HARDWARE

Where did these images come from?

https://www.instagram.com/fjg_3d/?hl=en

<https://twitter.com/adamshmamshon>

c

What hardware/software was needed
to produce it?

_1990-2000

Special purpose hardware

Industry-based standards

Human-Computer Interface (HCI)

_1990-2000

OpenGL

CGI feature-length films

New hardware capabilities

_2000-2010

Photorealism

Game boxes and game players

Programmable Pipelines

_2010- now

Mobile Computing

Cloud Computing

Virtual Reality

Artificial Intelligence

Real-time rendering and animation reigns

IMPORTANT

Art
Animation Production
Digital Post-Processing
Rendering

Story
Content
Modeling
Critical Analysis

Animation Systems
Standards
2D Animation

LANGUAGES

C++

JavaScript

.NET (C#)

2D SOFTWARE

Illustrator

Inkscape

Photoshop

Inkscape

3D SOFTWARE

Autodesk

Blender

Cinema4D

Maya

Rhino

Sketch Up

COMPOSITORS

Nuke

Flame

Houdini

GAME ENGINES

CryEngine

Unity3D

Unreal

Simmetri

**UMASS
BOSTON**

COURSES

3460.ORG

PROF DANIEL HAEHN

CS460.ORG

PH

ART 297	Introduction to Digital Media Art
CS 240	Programming in C
CS 461	Computer Games Programming
CS 470	An Introduction to Artificial Intelligence
ENGIN211L	Digital Systems with Lab
MATH 260	Linear Algebra
PHYSICS 312	Mechanics
PSYCH 255	Perception

RESOURCES

<https://www.siggraph.org/participate/volunteer/conference-volunteer-form/>

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

<https://www.meetup.com/B-U-G-Boston-Unity-Group/>

<https://publicvrlab.squarespace.com/>