



# Learning Computer Animation

ALL YOU NEED TO KNOW AND THEORY OF IT

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Computer Animation, is intrinsically a complex branch of computer science, whose result in itself is as much artistic as it is mathematic. In such context two different areas of Computer Graphics must be differentiated: technical animators, artistic design and animation.

## Interesting Sites:

- [Animation: Independent Study](#)

- [Course in Computer Animation \(GWashU\)](#)

- [Computer Graphics at Was.State](#)

- [Computer Graphics at U.C.Davis](#)

- [Graphics and Visualization Center \(Brown\)](#)

- [Visualization Center \(GaTech\)](#)

- [Graphics Group at Brown](#)

- [Online Course on](#)

The first area of study, **technical animators**, requires an indept knowledge of Mathematics and Computer Science (Computer Graphics, Image Analysis, Vision.) Thus, the possible attributes of a such career may include some of the following:

### Curriculum:

- Transformations
- Projections
- 3-D wire frame rendering
- Hierarchical polygonal modelling
- Lighting and shading
- Motion control strategies
- Use of physically based motion control of rigid and flexible objects
- Animation languages and programming
- Dynamic visualization
- Recording and editing techniques

The second area, **artistic design and animation**, comprises of a study on the different types and aspects of animation in relation with the actual pre-production, production, post-production, as well as the tools available and needed to achive such enterprise. As such the areas of experties of such professional would include:

### Curriculum:

- 3d modeling and rendering
- 3d computer animation
- 2d computer animation
- multimedia/interactive
- digital painting/drawing
- image processing

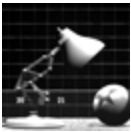
## Animation

- [PIXAR list of schools](#)

- [PDI list of schools](#)

- [Employment at WaveFront](#)

- [Employment at PIXAR](#)



- virtual reality (immersive)
- virtual reality (non-immersive)

### **Software:**

- Director
- Photoshop
- Quark Express
- Freehand
- Painter
- 3D Studio
- Authorware
- Alias

Schools at which one may learn such education include:

- Academy of Art College, San Francisco, CA
- Pratt Institute, Brooklyn, NY
- Rhode Island School of Design, Providence, RI
- San Francisco State University, San Francisco, CA
- School of Visual Arts, New York, NY
- University of Southern California, Los Angeles, CA

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