

3D Animation

Imagination Brought to Life

You may have often wondered how your favorite animation movies were made or how your video games can be so realistic and engrossing. You may have also wondered how you could bring the stories in your head to life or create worlds where others can get lost in. What you may not realize now is that a Career in 3D Animation would be the Right Step for You.

But perhaps you hesitate. Maybe your parents will not agree. Maybe they will misunderstand this as merely making cartoons. And while you love all things animation, you may not be sure if it can be turned into a viable career option.

Will you get a job? Will it pay well?

Where can you learn?

Will they be good?

With so many crucial questions, it is natural to feel a little confused. We're here to dispel the doubts and show you how animation can be a great career. We will also give you an overview of how we can help you develop your skills here through our comprehensive 3D & Animation course.



Who is this booklet for?

This Guide is for anyone interested in 3D Animation, really! However, primarily, it is aimed at **Students Who Are Graduating From High School** as they decide the next big steps of their lives.

It will also be useful for **Professionals** who are looking for a job change, people who wish to pursue courses out of interest and even for **Parents** who want to know what 3D animation is all about.

Our objective is to bring everybody on the same page, whoever is reading this guide. Read on to know about the various exciting uses of 3D animation, what it takes to be a successful animator, how to get started with 3D animation and the exciting career opportunities that await you.

Starting with the basics: What is 3D Animation?

Quite simply, it's a way to **Tell Stories**.

Throughout history, humans have found various creative ways to do the same. Books, music, dance, paintings, movies and now, we tell stories with 3D Animation.

3D Animation gives us a chance to actually build alternate worlds by just thinking about them. All other formats inherently have limitations. '3D Animation is limitless'.

It is imagination unbound. With 3D animation, the sky's the limit as far as imagination is concerned.

In technical terms, 3D Animation is the process of animating objects that appear in three-dimensional space. Put this way, it sounds boring! But think of the graphics in some of today's top movies. Think of the hauntingly beautiful world of Avatar, awesome spaceships from movies such as Star Wars and incredible battle scenes from "The Avengers". These are the works of artists who use relevant technologies to build us our favorite experiences.



5 Exciting Uses of 3D Animation

Honestly, there are way more than 5 uses in which you can use 3D Animation. However, to make things simple, let's get through 5 big ticket uses.



1. Medicine

- 3D animation can be used to produce realistic simulation of both human and animal bodies, for doctors and veterinarians to practice on.
- In fact, many anatomy classes in high school and colleges now use this technology instead of dissecting actual animals.
- Educational 3D videos can also be used for seminars regarding rare operations.



2. Defense

- 3D animation is a boon for law enforcement and military applications such as training and strategizing.
- Combined with *Virtual Reality (VR)* and *Augmented Reality (AR)*, they can take training to another level.



3. Engineering and technology prototyping

- 3D animation is used to create and test machinery, which can then be constructed.
- It helps in faster and more efficient innovation.
- It helps reduce waste significantly.



4. Architecture and design

- Many architects nowadays use 3D to draft proposals.
- This allows them to better envision their designs and a chance to experience the building as though in Real Life.
- It adds immense value to a flat design and ensures faster decision making.



5. Entertainment

- This of course, is the most famous application for 3D animation. And its popularity is the only reason we've put it in the last.
- From popular movies, ads, music videos to games - 3D animation is everywhere nowadays.



Ok, What next?

Now that you have more clarity, let's see how you can get started. Like in many other fields, and especially here, there's an initial investment to be done. This will primarily be in the form of the hardware and software that you will need. Below, we give you a sense of what these would be so you're prepared.

The Hardware you need to get started

A good laptop/computer that can handle the complex process of creating 3D work with these minimum specifications:

- Computer: CPU - Intel i5 or AMD Ryzen 5 or equivalent
- GPU - Nvidia GTX 1050 and series or AMD RX 560 and series
- A discrete standalone video card
- A dual core processor capable of running a 64-bit operating system (at the minimum)
- Minimum RAM: 8 GB
- SSD Drive
- A Hard Drive where you will be saving all of your files that will need to access from time to time.

The Software you need

There is a combination of Free and Paid Software that you will need to access for your learning.

Thankfully, For Students, a range of Free Solutions are available in the market.

- The most popular option is **Blender**.
- Other software that are free under Student License include - 3dsMax, Maya, C4D, ZBrush. These are paid software, free for students.
- Student license -
3ds Max- <https://www.autodesk.com/education/free-software/3ds-max>
Maya- <https://www.autodesk.com/education/free-software/maya>
C4D- <https://www.maxon.net/en/learn/educational-licenses/>
Zbrush- <https://store.pixologic.com/zbrush-academic-license.html>

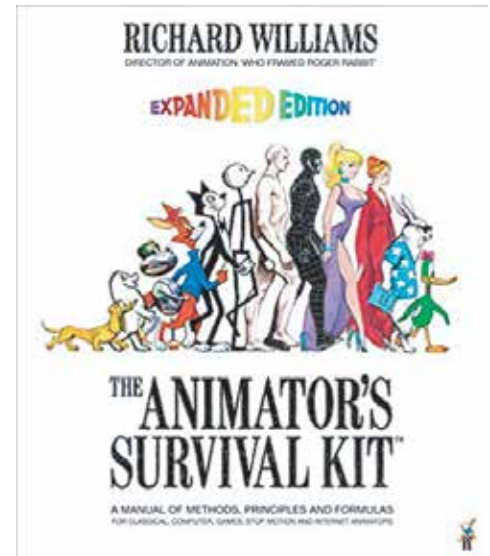
- The Industry Standard Software includes:



Best Animation Books to Read

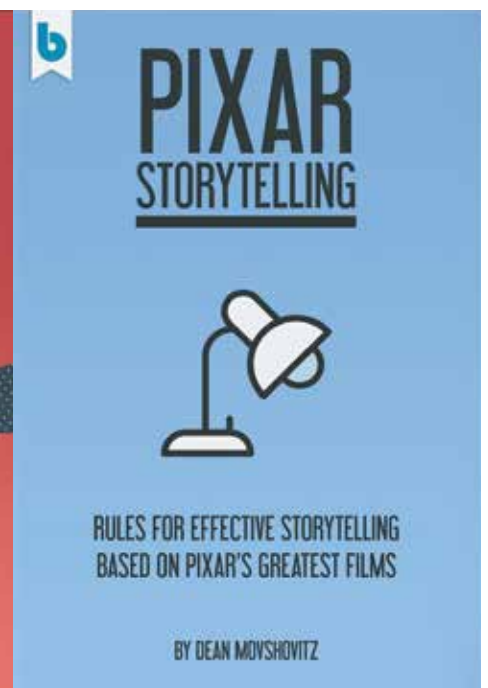
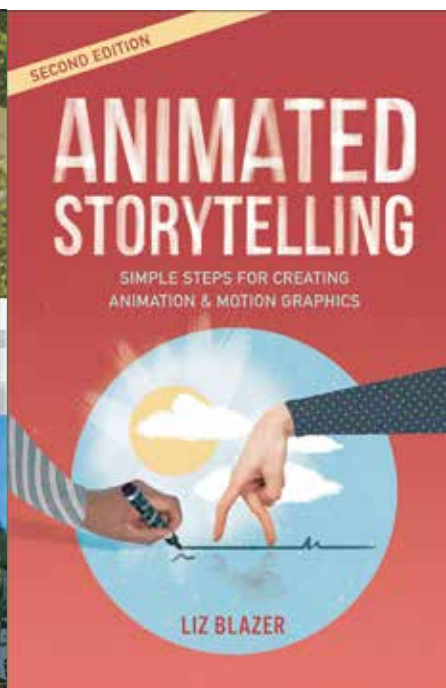
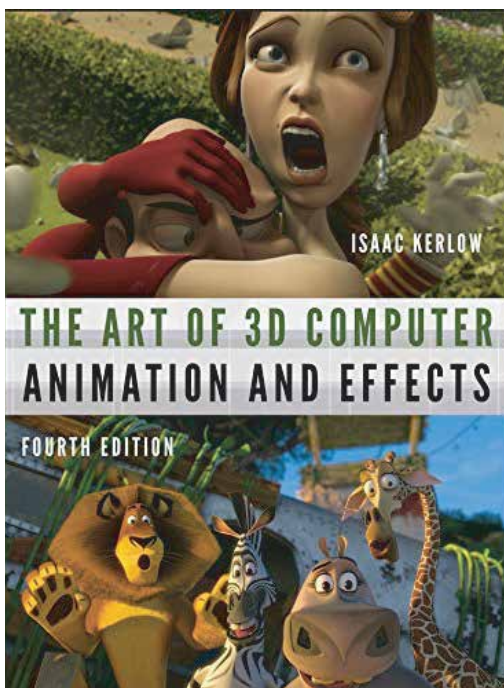
If there's only one book on your shelf (and there should be more), let it be this:

- Written by the award-winning animator and director, **The Animator's Survival Kit, Richard Williams** is a must-have for all aspiring animators.
- This book is considered as an essential manual of 'methods, principles and formulas' for Classical Animators, Computer Animators, Games, Stop Motion Animators.



Some Other Books:

- The Art of 3D: Computer Animation and Effects, Issac Kerlow
- Animated Storytelling, Liz Blazer
- Pixar Storytelling, Dean Movshovitz



Best Animation Movies to Watch

Even if you're just mildly interested in animation, there's no chance you haven't seen and enjoyed innumerable animated movies. As someone interested in animation, you're sure to have those that caught your attention or generated your interest in this field itself.

We've got a small list of movies that we think are a must watch. So, if you haven't decided, get through these as your plans mull in the background.

Watching These Movies can also help you:

- Understand animation better
- Understand the vision of today's biggest animators

The Best Movies Include:

- How to Train Your Dragon (2010)
- Beowulf (2007)
- Up (2009)
- Cloudy With a Chance of Meatballs (2009)
- Frozen (2013)
- Kung Fu Panda (2008)
- Avatar
- The Avengers
- Ice Age
- Star Wars
- Interstellar
- The Jungle Book
- Klaus (2019)

This list can be endless.



Aptitude and Skills Needed to be a 3D Animator

You need Imagination, creativity, sketching skills, good visual and aesthetic sense, good sense of color, attention to details and computer skills.

But all of these skills right now?

Relax! This is not what you are born with, but the mindset and dedication to grow and develop in life is most important. Conquering a path after that is easier.

To get started, you can talk to your friend, mentor or any institute with a bunch of people who are really passionate about their work.

For a start, join our 3D Animation community and ask your doubts. We are there to help you out & also, share your opinions to help others out!

<https://www.facebook.com/groups/artographystudio/>



3d Animation Career Scope

Globally, 3D & animation is a multi billion dollar industry. In India, it is expected to grow at a pace faster than the IT industry! Animation is a truly enjoyable field of work where you can be engaged with your passion 100% - this is not an option in many other traditional job roles. You're literally going to get paid to create magic! For the highly talented and ambitious lot, it is a highly gratifying job. Apart from millions in paychecks, there's recognition in the form of prestigious awards.

The animation industry really matured in India in 2015. Today, we are no longer a mere low cost outsourcing facility. We creators of quality original content in our own right. There are more than 300 animation studios which are estimated to have employed more than 15,000 animation professionals in the country. There's no denying that this field is the next big job creator.

What's more, many commentators believe that the animation, VFX, gaming and comics (AVGC) sector of India is only set to grow further. This means that the demand for skilled talent is only going to various

sectors such as tentertainment, media, government firms, education, industrial and product designers and many others.

What's more, the scene in India is heating up now more than ever. There's an increased push for and openness towards original content. Again, this means increased demand for animators and local talent.

You can study 3D & animation, graphics and multimedia courses either as a full-time or part-time student. Several programs are available that equip you with certificates, diplomas and degrees. While admission into full time courses, i.e. diplomas and degrees is offered on the basis of entrance exams, admission into part time and short term courses is offered on a first come, first serve basis. There are many institutes in all major cities and towns of India, both private and government for providing training in animation, graphics and multimedia. Many institutes also provide internships and arrange for job placements during or after completion of the course.



1. Possible Job Roles for an animator include -

- 3D Animator
- Image Editor
- 3D Modeler
- 3D Character Artist
- Character Animator
- Texture Artist
- Layout Artist
- Lighting Artist
- StoryBoard Artist
- Background Artist
- Clean Up Artist
- Rigging Artist
- Rendering Artist
- Digital Ink and Paint Artist
- FX artist
- 3D Visualizer

Animation has proven itself to be a lucrative and demanding career option in India. It comes with a high level of job satisfaction because people essentially get to work on their passion.

2. 3D animators can work with:

Work opportunities for quality animators and related professionals like graphic designers, multimedia and game developers, character designers, key frame animators, 3D modelers, layout artists and many others, exist in the following sectors at large.

- Advertising studios
- Online and print news media
- Film and television
- Cartoon production
- Theater
- Video gaming
- E-learning
- Game companies
- Filmmakers
- Freelancers
- Product design
- Architects

Do note that, these are only a few examples of what's possible. Opportunities exist both with public and private sector enterprises. Animation itself is an industry, and as an industry it's on a boom. There exist numerous animation houses both in India and abroad who work for various types of clients. An animator and multimedia professional can also work as a freelancer or start his/her own enterprise given that he/she has entrepreneurial skills and funds for the same. Animators work in various capacities.

3. Salary Prospects:

Animation is a burgeoning industry and this is reflected in the increasingly better pay packets that these jobs command.

- Juniors who enter the workforce can expect to earn ₹25000.
- Once they move up to a senior position, they can expect a minimum of ₹100000.
- Subsequently, with the right kind of high ticket projects, greater experience and exposure, animators can command hefty salaries running into ₹100000- ₹200000 amounts.

Industry Trends

From an industry perspective, animation is really booming in India. The outsourcing of projects by giants such as Disney is just a testament to how far we've come.

From an innovation point of view, there's always something new on the horizon. This means animators need to be on their toes, picking up the latest trends so they don't get left behind.

- Nowadays, there is an increasing trend towards 3D motion graphic, detail texturing, optimized systems for fluids and dynamics, industry standard and fast render machines, visual and animation loops.

- **The Market for 3D Animation**

- Television, Film and Advertising have generated a high demand for animations and special effects.

- Today, India is able to hold its own in a western dominated field. With increasing demand

Artography is a fine arts institution dedicated to nurturing the talent of both emerging and established artists. We conduct ourselves like a temple of learning. We are serious about going beyond the offering of courses. We hone the basics of our students and encourage them to go beyond their known talents. The end product is inevitably a student who masters a complete thought process. Naturally, such a student is more than capable of fitting into the job market. But more importantly, our students remain learners for life.



3D ANIMATION COURSE CURRICULUM

COURSE LINE-UP

Sketching
Live sketching
Perspective
Object and value study
Still life
Anatomy for artist
Concept art
Character development
Visual development
Stylization
Storyboarding
Digital painting
Software covered:
Adobe photoshop
Autodesk sketchbook

Specialisation program

Modelling and texturing
High polygonal modelling
Low polygonal modelling
Facial and artistic Anatomy
Inorganic modelling
Hard-Surface Modeling
Digital sculpting and Texturing
Character and Assets Development
Lighting and Rendering
Fundamentals of CG Lighting
Shading
Lighting environments
Production Tips and Tricks

Specialization in 3d animation

Creating a Skeleton
IK & FK Rigging
Key Frame Animation
Principles of animation
Character Animation
Body Mechanics

Tools and Software Covered

- 3Ds Max
- Maya
- Zbrush
- Mudbox
- Photoshop
- Substance Painter
- Quixel Suite
- After Effects
- Premier



3D Animation 18 months program

FIRST TERM	SECOND TERM	THIRD TERM
<p>Art Fundamentals Life Drawing Drawing Fundamentals Shading Value Study Drawing in Perspectivet Sketching Digital Sketching (using Pentablet) Color Theory Body Proportions Photoshop Basics Digital Painting Bone Study Head Skull study</p> <p>SOFTWARES : Photoshop</p>	<p>Bones Study - upper body - lower body Muscles Study Clay Modelling Figurative Drawing Intro to Maya</p> <p>SOFTWARES : Photoshop Maya</p>	<p>Hard Surface Modelling - Cars - Weapon - Robots - Machine Game Assets & Environment</p> <p>SOFTWARES : Maya</p>
FOURTH TERM	FIFTH TERM	SIXTH TERM
<p>INTRO TO Z BRUSH Prop Detailing in Z BRUSH Baking Unwrapping Game Ready Assets</p> <p>SOFTWARES : Maya Z Brush</p>	<p>Character Modelling - Male and Female torso - Male and Female Lower Body Head Modelling</p> <p>SOFTWARES : Z Brush Maya</p>	<p>Character Development - Clothes - Armor - Hairs Look Development Game Ready Character</p> <p>SOFTWARES : Maya Z Brush</p>



What Next?

Hopefully, you're convinced about how great animation is as a career choice. So, you want to know how to go about it?

It makes sense to enroll for a good 3D Animation Course. This course will help you to turn your raw potential and creative energy into works of beauty.

Reach Out to us for a Free Consultation

91-7399111222 | artographystudio.com

