Careers in the Game Industry

For many aspiring digital artists, a job in the game industry is the dream of a lifetime. Whether it's fashioning fantastic worlds and characters from scratch or painstakingly re-creating accurate World War II submarines, the life of a game artist can be greatly rewarding. A game artist's career comes with its fair share of challenging times, however. The more you know early in your career, the better off you will be. Before you delve into the ins and outs of art production, it's important to understand not only what is expected of you as a game artist but also what the game industry is all about.

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In this chapter, we'll discuss the following topics:

Developers and Publishers

Artist Jobs in the Industry

Demo Reels

The Game Development Pipeline

Developers and Publishers

More often than not, games are created through a partnership between two distinct companies known as a *developer* and a *publisher*. The developer actually creates the game. The publisher takes that game, markets it, and distributes it throughout the rest of the country or world.

The relationships between developers and publishers have evolved in many ways. These relationships are normally divided into three categories: first-party developers, second-party developers, and third-party developers.

First-party developers These developers are entirely owned by their publishers. One example is Nintendo. In addition to being the originator of the Nintendo brand gaming consoles (Game Boy Advance, Nintendo Revolution, and Nintendo DS), they are also the developer. Their trademark games, such as *Super Mario Brothers* and *The Legend of Zelda*, are games they create themselves using teams of developers under their employ.

Second-party developers These independent developers are not owned by a publisher. They have, however, signed agreements giving a specific publisher the exclusive right to publish their titles. An example is Naughty Dog, the developer of popular titles such as *Crash Bandicoot* and *Jak & Daxter*. They have signed exclusive publishing rights with Sony to develop their games for the Playstation2.

Note: The defining line between first-party and second-party developers is a thin one. Generally, a first-party developer can be considered an in-house department of the publisher, while a second-party developer is a separate entity.

Third-party developers These developers are the most common type. They sign contracts with a publisher on a per-game basis. In fact, many third-party-developed games are released on multiple gaming platforms. An example studio would be Neversoft. Their game *GUN* was developed and released on the Microsoft Xbox, the Microsoft Xbox 360, the Nintendo GameCube, the Sony Playstation2, the Sony PSP, and the PC. For this game, Neversoft partnered with a publisher known as Activision, a company that arranges distribution deals for all major game platforms.

There are many pros and cons to being a first-, second-, or third-party developer. For instance, third-party developers have a lot more freedom to develop a larger variety of projects for a larger variety of platforms because they aren't constrained to a certain publisher or platform. Once a project ends for one publisher, they can sign another

project for a completely separate publisher if they so desire. However, a third-party studio is always on the lookout for its next project and is constantly trying to get that next deal. Sometimes there can be long gaps of time between projects—and thus between paychecks! These gaps in revenue often result in having to cut costs—and subsequently employees.

First- or second-party developers, because the studio is owned by the platform for which they are developing (or because the studio has been given exclusive rights to their games), do not necessarily have to worry as much about where that next project will come from. However, there can be a lack of variety in the work and a greater chance of creative burnout in such environments. There are also far fewer first-party developers in the industry, and therefore they can be much more difficult to find employment with.

All in all, typical rookie game artists may not be terribly concerned with this information since they're just trying to get their feet in the door. As you gain both experience and a more discerning eye for the kind of work you want to do in the future, keep in mind these distinctions.

Artist Jobs in the Industry

As an artist in the game industry, you will eventually work for a developer of some sort. But what jobs are available for someone of your talents? A variety of jobs are available in the art departments of game developers—anything from junior artist and 3D artist to art director.

One thing about the modern working world in general that's true about the gaming industry in particular is that you may end up wearing a lot of hats under one job title. It's becoming more and more common to find game developer positions combined into a single job. For example, most modelers are also expected to be very capable texture artists. When browsing a studio's help wanted list, always keep the other job criteria in mind. Make sure that you are at least familiar with the whole process that goes into creating a piece of game art, since you never know when you may be called upon to pick up the slack in another department.

Now let's discuss these positions in depth.

Note: The positions at game studios vary greatly. For instance, a 3D artist at one studio may have a completely different set of responsibilities or duties than a 3D artist at another. I can, however, give you a general idea of what you might expect in such positions. These generalizations should help you better understand the kinds of jobs available to you in this industry.

Junior Artist

A junior artist is typically an entry-level position in the industry. With little or no prior game experience, a junior artist is usually hired into a company primarily to create background elements for the developing games and to learn the development process.

Many studios hire junior artists on a temporary basis. These positions are used to ramp up the art staff to handle the stress period of the development schedule, which eventually ramp back down as the game nears completion. You must prove that you are a capable and talented artist during these kinds of arrangements so that you can increase your chances of becoming a permanent employee.

3D Artist

The position of a 3D artist (or staff artist) is fairly generic in title if not in duty. As unexciting as this position might sound, it could very well be the job with the most exciting variety of duties. As a 3D artist, you could be called upon to create just about anything—vehicles and weapons, structures and environments, characters and creatures, planets and star fields, and beyond. In most cases, 3D artists make up a large percentage of a studio's art department, and the position can be divided into three main categories: modeler, texture artist, and animator.

Modeler A modeler is an artist responsible for creating the *geometry*, or the surfaces, of an object in a game.

Texture artist A texture artist takes the completed 3D model and creates *textures*, or surface details, for the object. In most cases, the same person acts as both the modeler and the texture artist.

Animator An animator is an artist who is responsible for rigging and animating the characters, creatures, and moving objects found in a game. Animators rarely are involved with the modeling or texturing of a game model. Instead, they focus on that model's movement.

Concept Artist

Concept artists are responsible for creating the look of the game world. A concept artist illustrates the big-picture ideas of the game, such as environments, characters, creatures, and vehicles. These designs, once approved, are then given to the 3D artists to develop into the game.

Character/Environment Artist

A character or environment artist is a specialist who is responsible for creating (and sometimes animating) the characters and creatures or the environments and structures found in a game. Such specialized positions are generally found at larger studios, where there are enough people to make such positions viable.

FX Artist

An FX artist (or effects artist) is responsible for creating the many particle effects found in games. These can range from weather effects such as rain and snow to action effects such as the flash of a gun barrel. The vast majority of such effects are generally composed entirely of *sprites,* small images that are affected by dynamic forces such as gravity, wind, or turbulence.

Technical Artist

A technical artist is a combination artist and programmer. While such persons have the creative responsibilities of an artist, they also have the scripting and programming skills necessary to create scripts and plug-ins for Maya or other applications to make the artists' jobs easier and more efficient.

A technical artist can also be responsible for creating setup tools, such as a common animation rig that is used for all of the characters in the game.

Senior Artist

A senior artist is someone who more than likely has been in the industry for a number of years or who has a couple of finished games on his résumé and a proven track record. They are generally the ones given the more important responsibilities, such as creating the main characters or other critical elements, in a game project.

Lead Artist

Lead artists are put in charge of a group of artists within a team. They ensure that their group follows instructions and accomplishes its goals on time. They are generally the first people who review a finished art asset before it is sent along on the approval process. While lead artists incorporate more management into their roles than most other artists, they also tend to have at least some art production duties. Depending on the size of the team, a project can have any number of lead artists.

Art Director

The art director holds the top position in the artist chain of command. Responsibilities of this position include managing and scheduling the rest of the art staff, hiring and firing, and other such managerial duties. In general, art directors have a lot of experience in the game industry and usually work their way up from the position of lead artist.

Note: How much money does a game artist make? The answer is highly relative. The latest results (as of this writing) from the Game Development Salary Survey can be found on the Features page at http://www.gamasutra.com.

Demo Reels

Getting your foot in the door of a game development studio can be challenging. It's mostly a matter of the quality of your portfolio, but applying for the right job at the right time and having a little bit of luck can also be factors. If you don't have any luck in your first few attempts to find a job, have patience and keep trying. With a quality portfolio and the willingness to relocate, you should eventually find a job.

Your portfolio is the most important tool you need to get that first job. I also recommend creating a website to display your portfolio online. Even something simple containing only your portfolio of images and animation and an e-mail address is better than nothing. A website will give possible employers something that is easy to click through, so they can get a good idea of your potential. Preparing a demo reel is definitely a good idea. A demo reel is a video presentation of your portfolio. Here are some demo reel tips:

Keep it short and sweet. Try to limit the length of your reel to two or three minutes. As it approaches the four-minute mark, no matter how good the work is, potential employers may start looking at their watches. Get their attention with a short, high-quality reel. If you have additional work, you can direct them to your website or have them request more samples from you.

Don't make your opening too long. An opening sequence that shows your name and contact info is fine, but don't make it too long. Two or three seconds should be enough. Don't forget that a viewer can pause it. Try to make sure any blank, silent time before the reel starts is as short as possible. Reel reviewers can be pretty impatient, and if they don't see something within a few seconds, they might just discard the reel before it starts.

Put your best work first. You may feel like you want to end your reel with a bang by showing your very best work last, but many reviewers might not have the time or patience to view an entire reel. Putting your best work up front will grab their interest early, which may entice them to watch the rest of the demo. If a weak piece is the first thing they see, they may not wait to see the awesome work you display later.

Use a pleasant music track. A reel doesn't necessarily need to be an audio extravaganza, but you should put some sort of music to your reel to involve the viewer's ears. Silence during a reel's playback can seem boring, even if the work being shown is good. Adding a little audio can make your reel more appealing, which is always a good thing!

Don't dwell too long on a single piece. When your reel is short, focusing on a single piece for thirty seconds or more may seem conspicuously like padding your reel for length. Don't be afraid to have a shorter reel, but make sure the work is your best.

Keep your reel focused. Customize your reel for the job for which you are applying. If you are applying for a modeler or texture artist position, don't have too much animation or other off-topic work. Otherwise, you're just wasting the employer's time. If you're applying for different kinds of jobs, make multiple reels that focus on the jobs in question.

Label your work accurately. Make sure that the employer understands what your contribution is to the work you submitted. If you collaborated with a group to complete a certain piece of work, send a *breakdown sheet*, a description of the reel that details the project title, what the piece was used for, and your role in its creation. This way, the employer can focus on your work and not someone else's. If you did all the work yourself, say so.

Be kind. Rewind. Possibly the most frequent mistake that job candidates make is forgetting to rewind their reels before sending them to potential employers. Don't forget to rewind your VHS reel before you submit it.

Note: Make sure you carefully read the submission requirements of a job ad. Many will specifically ask for a website or a VHS reel rather than other more-modern media. CDs and DVDs are not as desirable because of the many different DVD brands and audio/video codecs out there that potentially won't work on their players. In contrast, a VHS tape works with any VCR.

Art Tests

Studios frequently ask applicants to complete an art test. This is usually a good sign, because it means they are interested in you for the job and they want to see how you perform a given task.

Art tests are also given to make sure that the work you are taking credit for is actually yours. If you deliver an out-of-this-world demo reel, but your art test results are poor, they may call into question your truthfulness.

In most cases, however, the art test is to gauge your performance for their current project. After all, you may have shown in your demo reel that you can create awesome skyscrapers and motorbikes, but can you do just as well with a knight on horseback or a post-apocalyptic robot? The art test will find out. Make sure you're prepared.

Crunch Time

The thought of creating games is obviously very appealing. One common misconception, however, is that working at a game studio means you're just playing games all day. That could not be further from the truth! In fact, your game-playing time might dwindle because of the amount of work that is involved. It *can* be fun work, but it *is* work just the same.

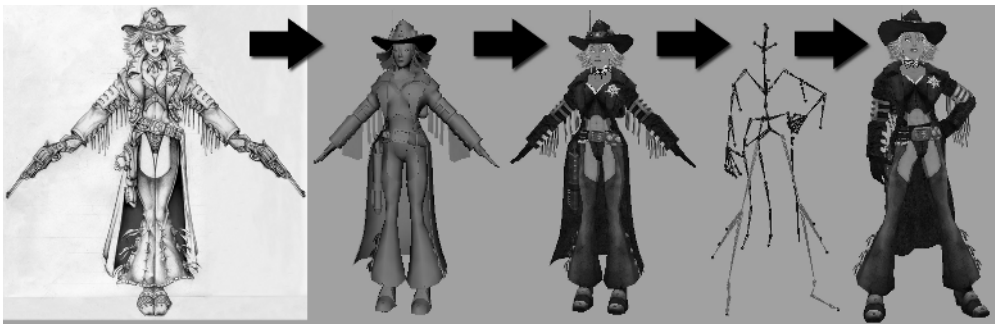
Most people interested in game development have heard of the dreaded *crunch time*. This refers to a period of time in a game's development schedule where overtime is mandatory in order to meet fast-approaching deadlines. What was once a fairly mild eight- or nine-hour day suddenly balloons to twelve, fifteen, or more hours a day. Crunch time can potentially last weeks or even months on end.

The best way to avoid massive amounts of crunch time is to do your best to get things done efficiently, accurately, and on schedule during your normal workday. Some crunch time should probably be expected. However, if everyone on a project works together and makes full use of their time, it can be minimized.

Of course, crunch time doesn't necessarily have to be all bad. A good employer will reward such hard work with extra pay or bonuses!

The Game Development Pipeline

The art production pipeline is the path that a game object takes from beginning to end, from conception to effects. This path actually comprises only one facet of the overall game development pipeline. Understanding the pipeline processes early is a great asset to potential employers, as it gets you that much closer to being able to contribute to it. The average development pipeline is as follows:



Design In the design stage of the production pipeline, writers and designers play a crucial role in the development of a game. They are the ones who actively give birth to the idea that eventually becomes a game you see on the shelf. They come up with the story, script, and the overall game play. When the writers and designers are ready, they pass their ideas on to the concept artist.

Concept art Concept artists receive the documents that describe the game's characters and world. They visually interpret the ideas, creating dozens of sketches and paintings before they finally find that perfect look for the game. This is an important step in the development of a piece of game art. When a concept has been completed and approved by the art director, it moves on to the modelers.

Modeling A modeler takes the approved concept art and uses that information to create a 3D model, or *art asset*, that can ultimately be used in the game. Before it does, however, it must go to texturing.

Texturing Once modeled, the 3D object must be textured. Textures are primarily created with a 2D program such as Adobe Photoshop. After textures are applied, the model continues on to be rigged, if necessary.

Rigging To create movement, models need to be rigged. Rigging can be done either by a specialized technical artist or by the animator. *Rigging*, as described throughout this book, is the creation of animation controls that the animator uses to create movement. Once the controls are in place, the character can travel to the animator, so to speak.

Animation With the animation controls in place, animation can commence. The animators will perform any number of actions with the model, as if they were manipulating a marionette—a highly complex, digital marionette, but a puppet just the same. When the finished model's performance actions are approved, the model can then go to the FX artists.

Special FX All that is left in the art production part of this pipeline is adding the eye-candy effects. The FX artists can use any number of tools to jazz things up. They usually use custom tools developed for the game in question. Once the model's journey through the art pipeline has completed, the model is exported to the programmers.

Programming While the artists were hard at work creating this model, the programmers were plugging away at their own workstations. They created code for the express purpose of giving the completed model the necessary attributes to make it behave and react as expected. Before an art asset can be utilized in a game, however, it must make one more trip—this time to the level designers.

Level design Using custom tools, the level designers place the newly completed character into a level in the game, ready to meet the players who later will purchase the finished product.

Thus ends the life cycle of an art asset. Make way for the next one. Now that you understand how games and game assets are made, let's get started on one of your own.

Artist Profile: Floyd Bishop

Job Title Creative director/owner
Studio Bishop Animation
Credits *Rise of the Kasai*, *SOCOM II: U.S. Navy SEALS*, *Ice Age* (feature film)
Personal Site http://www.bishopanimation.com

Q. How and why did you get into the game industry?

A. I have a degree in communication design. About halfway through school, I decided that I didn't like graphic design enough to do it as my career. I bought a bunch of books and talked to as many animators as I could to get feedback on my work and improve my skills. I moved around a lot and tried to meet as many CG artists as I could.

My big break as an animator came when I was hired at Blue Sky as a character animator on the first *Ice Age* film. I learned a lot there, and it really opened my eyes to the realities of the industry. After *Ice Age* wrapped and most of the crew was let go, I freelanced around Manhattan for a while. I worked mostly on commercials and television shows at this point. I got together with a few friends to take on bigger projects and got to work on my first game project, which was *SOCOM II*.

I was then asked by Sony to work for them full time on-site in San Diego. After only three or four weeks of work, I was let go because the title I was working on got canceled (the realities of the industry). I had a job interview the next morning and was hired at Bottlerocket Entertainment in Del Mar, California, only eight hours after being laid off at Sony.

At Bottlerocket, I really learned all about games and what goes into making them. It was there that I worked on *Rise of the Kasai* for the PS2. It was a great experience. In addition to animation, I was responsible for the bulk of the effects in the game (both in-game and cinematics).

In April of 2005 my family and I left California and moved back to our home state of Pennsylvania, where I started up Bishop Animation.

Q. Describe your role at your studio.

A. Well, I'm the owner/creative director here. I have a small in-house crew and an extended network of freelancers that I use for specific projects from time to time.

Q. What has been the most inspirational to you in regard to your artwork?

A. In the summer of 2004, I got the chance to meet Frank Thomas and Ollie Johnston. A friend and I spent an afternoon at Frank's house. They looked at some of my work and gave me feedback on my animation. They also filled my head with stories of their careers, their views on the future of animation, and stories of working with Walt Disney (the man). It was very

inspiring. They also signed my *Illusion of Life* book, which is the copy I bought to teach myself animation. Frank also drew a Mickey Mouse in my *Nine Old Men* book. Whenever I get bummed out or stuck on a specific shot, I think of that day or take a look at the Mickey Mouse, drawn with a shaky hand. It gets me going, and I can work through the worst creative blocks that way.

Q. What is your favorite style of animation to work with?

A. I really enjoy animating things that are cartoon-like in nature. A realistic guy running with a football doesn't excite me too much as an animator. Now if it was a cartoony *octopus* running with a football, then I'd get excited.

Q. What is your favorite kind of game?

A. I really enjoy the openness of the *Grand Theft Auto* series. I also like the First-Person Shooters (FPS) such as *Unreal* and *Call of Duty*. Some of the longer games, such as *The Legend of Zelda: Wind Waker*, are beautiful as well, but man, do they take a long time to complete!

Q. Which Maya animation tool, command, or editor could you not live without?

A. It sounds like it's not a big deal, but I use the `+=` and `-=` commands constantly. [In the Graph Editor (Window > Animation Editors > Graph Editor), selecting a keyframe and typing `+=` or `-=` and a number in the Stats input areas will decrease or increase the key's value by that amount.] I also like to scale my keyframes quite a bit. I work out nearly all my timing while sitting at the workstation. I'll playblast [Window > Playblast], adjust, playblast again, and adjust until I get things working the way I want them.

Q. What advice might you have for the up-and-coming animator?

A. Don't rely only on books for your studies. Study animated films as well as live-action films. Go outside and watch animals in the park. Go to the food court at your local mall and watch people eat their food or shop.

Another thing I see a lot of in animation reels from beginners is bad animation in regard to weight. Heavy things need to feel *heavy*. A walk cycle involves a lot more than just forward movement and swinging arms and legs. Get up out of your seat and act it out. What happens to your hips when you walk? How does your weight shift from foot to foot? If you're looking at your animation, and something doesn't look quite right, nine times out of ten it has to do with the way you are animating the weight distribution and balance of your character.

Also, don't be afraid to push things. The worst comment I hear from time to time is "It's just a game." I hate that. You're asking an audience to spend hours and hours with your game. The least you can do is make sure the animation looks good. In an action game, someone is going to watch several hours of that run cycle you're animating. Make it look great!