

Careers in Computer Graphics Entertainment

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and Magic

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The Orphanage

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1 Introduction: Rachel Falk and Kate Shaw

This panel provides a forum for information exchange between those interested in this field and the companies they might work for. We will specifically address the needs of the job market today and how to best prepare for entry into the industry.

Large companies have become departmentalized and require a specific set of skills for each production department. Smaller companies may rely more on individuals who can apply themselves in multiple areas or on skilled generalists. Depending on the company, its size and area of work, these requirements can vary. We intend to discuss these topics, their differences and similarities, and the advantages of each.

The panel consists of representatives from large, mid-size, and small companies that represent a variety of disciplines such as visual effects, digital features, commercials and games.

Topics of discussion will include skills required and job descriptions for production, production support, entry-level, and internship positions. Additional topics include how to apply for work, reel and resume preparation, and typical shortages and surpluses in job categories. Some of the questions we anticipate this panel addressing are: What does it mean to pursue a computer graphics career? What is the difference working in digital features versus visual effects? What is the difference between working at a small studio versus a large studio? What should I concentrate on while I'm pursuing my education? What will make me a strong applicant? What kind of position can I expect to get when I finish school? How should I determine my short- and long-term goals?

It is important for students, educators, and others to have a clear understanding of the job categories available and the variety of computer graphics entertainment companies in business today.

2 Hael Kobayashi

In recent years we have seen large numbers of graduates emerging from digital media, design, and computer arts programs. They join the ranks of those who have graduated from computer science programs over the last 15+ years, as well as artists, researchers and technicians who are crossing over to digital tools from more traditional environments.

With the ongoing convergence of the broadcast, online, gaming, video and film mediums, it is important for individuals to maintain some focus for their interests. If you are just starting out, think about what areas of digital media really switch you on. Is it: concept art and design; animation; research and development; technical direction; or perhaps project and production management. Take stock of what your strengths and weaknesses are in terms of skill and ability. Remember that ongoing development of your communication and interpersonal skills will help you work in our highly collaborative industry.

Visual effects for live action require teams of 3D artists, as well as 2D artists, and with a few exceptions, the work is generally divided up across a few facilities. Artists may be asked to work in a single specific area, although it is likely that some artists will work in one area then shift to another, depending on their skills. The schedule can range from several weeks to several months. The smaller companies, of around 15 +/- people generally have a core team of all-rounders, artists who are good at several skills and they enjoy the continual diversity.

Digital features primarily rely on 3D artists. The work is generally done by a single company or studio. The artists are divided into skill groups as the pipeline is more complex, and it becomes necessary for resource planning to have a structure of this kind in place.

Artists can gain valuable experience from any of these situations. It's important to note that you will find specialists and generalists in most companies these days. So if you are not sure of which direction you are going in at the outset, go with what you are initially good at and look for ongoing opportunities to gain some expertise in other areas.

3 Luke O'Byrne

A strong applicant will have varied experience on their reel, and be able to describe the techniques they employed to create the certain looks or effects. They will also have varied skill sets and software packages. Many of our TDs composite their own shots, for example. Many modelers can UV map, texture and rig. The advantage of being a small company is that we also look for sharp candidates who have the potential to learn new skills and teach them to be generalists in house. The majority of our artists leave us with far more skills than when they arrived.

In education, students should concentrate on learning as many software packages as possible, you can never know too much. Also, doing your own independent project is a great idea because it shows off many of your skills and also shows initiative and follow-through. Recent graduates can expect to start in Rotoscoping and/or painting, but almost all of our entry-level roto artists from last year are now compositing challenging shots on a feature film.

4 Dan Scherlis

The game industry employs many artists, and as game-console capabilities improve, the artists are becoming an ever-larger portion of a game development team.

Furthermore, the game industry includes a variety of media and project scales. I will speak from my experience as game producer and CEO, leading giant MMOG teams, small PC-game teams, and tiny mobile-game projects. From the hiring manager's point of view, I will discuss where game companies find their artists, the

artistic specialties in highest demand, and nature of those artists who quickly advance. Suggestions for students and industry-entrants will be derived from specific examples of applicants that “got themselves hired” or of the summer interns who were most attractive for full-time positions.

Game development companies have different cultures, pressures, and operating environments than other artistic production firms. The interactive nature of the product means that artwork will often be presented to the gamer and dealt with in unintended and unexpected ways. The cutting-edge – and thus buggy – nature of the software brings about asset-control and software-integration methods that are driven primarily by software engineering needs.

Aside from differences in the product itself, and from various industry-cultural issues, the game industry has its own patterns of hiring, and sharp cycles of ramping up and down based on product schedule and on a particular company’s own patterns. We can discuss specific questions the applicant should ask, and specific resources for researching prospective employers in the game industry.

The specialties and skills expected of an artist vary with project size. On a 60-person project, the many artists are organized into five or more different categories. On a mobile game project, one more often encounters a single artist, covering every aspect of visual presentation.

The skills that get artists promoted – or fired – are often not the artistic ones. Examples will be cited of successful game artists, including how they manage their careers, their skill sets, and their employers. These skills, and the work experiences, are dramatically different for the artists in the different media (PC or console, online or mobile) and work environments (small indie developer or giant publisher).

5 Bob Nicoll

The current job market in the games industry is both strong and competitive. With the pending release of next generation consoles, there is a growing need for talented individuals to develop tomorrow's games.

The challenges ahead are significant and will require prepared and talented individuals. Convergence has been the catchword of the last few years.... we're now living that today, artist's now cross between Broadcast, Film, and Games regularly.

The promises of real-time broadcast quality are now coming to pass. Next generation consoles are just around the corner with new challenges waiting. What will you need to know? How do you prepare?

An interesting discussion point is resumes and reels for the games industry - an impressive reel that demonstrates breadth of talent is key. Designing a game level is even more impressive and one of the best ways to get noticed.

The five primary skills that we look for across the board in job applicants include:

- 1) Problem solving skills – For some positions, understanding math is critical
- 2) Plays well with others – Working on a team and being able to work under pressure – during crunch time, its long hours in close

corridors. Must have a good sense of humor, not to mention good hygiene

3) Aesthetic background – Must be creative and visual

4) Technical skills – An understanding of computer skills and design programs

5) Play the game – We look for avid gamers with a passion for creating AAA titles with AAA people

Electronic Arts develops and publishes many games with studios all around the world.

A typical game development team is made up of the following positions:

ARTISTS - The art direction in a game should be able to balance both storytelling and game design

TECHNICAL ARTISTS – A bridge between the Artists and the Engineers, a TA is comfortable working with both the art and technology of game graphics.

ANIMATORS - The animation team breathes life into game assets.

MODELERS - The modeling team works closely with level designers, layout artists, engineers and modeling TA’s to both create modeling technology and to choose the modeling techniques appropriate for a game.

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