Connecting the Game Industry with WPI

An Interactive Qualifying Project Worcester Polytechnic Institute

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Abstract

WPI hosts a career fair every semester where many WPI students apply for job or internship positions with various companies. However, there is a distinct lack of attending companies that require the skills of Interactive Media and Game Development (IMGD) students. We interviewed IMGD professors, members of the game industry, a variety of company representatives, and went to networking events in order to understand what we could do to bring more IMGD related companies to campus. Our hope is that our efforts will lead to IMGD students having an easier time finding work as well as planting WPI on the local game industry's radar.

Introduction

WPI's career fairs is one of the most popular events for students, as it allows them to get in contact with potential employers. On a select day every semester, companies come to WPI and gather in the campus's Sports and Recreation center and set up tables which are manned by company representatives. These representatives may be part of the company's hiring department or alumni from WPI that are currently employed full-time by the company. Students chat with these representatives and give them their résumés, hoping that they may be hired.

However, there is one group of WPI students that rarely goes to these career fairs. WPI Interactive Media and Game Development (IMGD) students are usually unable to find any opportunities at career fairs. They cite a lack of companies, specifically game companies, to which they can apply and give their résumés to. This problem is particularly pronounced with students on the art track, because their skills do not cross over with the computer science field. There is no lack of computer science focused companies at the career fair, so tech-track students always have the option of applying with them.

Multiple sources have ranked WPI's IMGD program as one of the best.

Successful Student lists WPI as number 10 on their list of 27 best video game colleges¹, while The Princeton Review ranks WPI as number 6 on the list of top undergraduate schools to study video game design². Yet, many WPI students still have trouble finding opportunities for summer internships or jobs in the game industry.

¹ http://successfulstudent.org/27-best-video-game-colleges-2015/

² http://www.princetonreview.com/top-undergraduate-schools-for-video-game-design.aspx

The goal of this project is to find the reason for this discrepancy. Are these types of companies unaware of the IMGD program and the students it graduates? Do they not have any positions to fill? Perhaps there are not many of these companies in the area? Are they simply not interested in hiring students? Do they face some other obstacle that keeps them away?

In order to answer these questions, we conducted interviews with three separate groups, members of IMGD faculty and WPI's Career Development Center (CDC), representatives of companies that attend WPI's career fairs, and members and representatives of the game industry. We also wanted to get opinions from IMGD students, as they will be the ones that will ultimately be affected by the findings from our research.

We wished to speak with both IMGD faculty members and WPI's CDC in order to get their opinion on why game companies have not come to WPI career fairs. Most of the IMGD professors have worked with game companies in the past, and have a strong knowledge of the industry. The CDC coordinates the career fairs, and they have tried contacting game companies to come to WPI career fairs. By listening to both of these groups, we were able to gain a better understanding of what kind of state the game industry is in, and how we should proceed with our project.

By speaking with companies at the career fair, we learned why they WPI's career fair constantly has a large attendance. We learned why these companies keep coming back to WPI, and what they think makes WPI students stand out from the rest of the employees that they hire for internships or regular job positions. With this information,

we gathered some of the selling points that we could try to advertise to game and digital media companies in order to bring them to future career fairs.

Finally, we wanted to talk to game company representatives and members of the game industry. These people are essentially our students' role models. Our students want to be in their positions. These industry members know the ins and outs of company hiring policy, how they were able to get hired, and what they have achieved while in the industry. These are the people that we are trying to bring to the career fair. We theorized that if we were able to talk to these people, we could not only try to convince them why they should come to WPI career fairs, but also determine what these companies look for when hiring.

This paper documents how we were able to get all of the information relevant to our goal: to find ways to bring these companies to WPI's career fair, and if not, find other ways to connect them with IMGD students. It includes relevant background information, our methodology, our findings, and our recommendations for the future.

Background Research

As we began to research this problem more closely, we first looked into some data from past WPI career fairs. We found that while, on average, around 200 companies attend the career fair each semester, only about 10 are interested in IMGD students³. Furthermore, based on conversations with other students who have attended the career fairs, most of those companies are only interested in computer science-oriented IMGD students.

By looking at attendance information for Boston Post-Mortem, a monthly meet-up of Boston-area digital entertainment producers, it is clear that there are at least seventy-seven companies in the New England area making games, as well as many other companies outside of the game industry that use IMGD-related skills⁴. This begs the question: if so many companies are out there, why are they conspicuously absent from WPI's career fairs?

In order to begin to answer this question, we first need to define what we are looking for in an "IMGD-related company". For our purposes, an IMGD-related company is any company or organization that employs people that utilize skills and knowledge that WPI IMGD students learn in their classes. By this definition, an IMGD-related company does not necessarily have to develop games, so long as it requires skills such as animation, modeling, game programming knowledge, etc.

We further separated IMGD-related companies into three separate categories, independent game developer, "Triple A" or big-budget game studio, and digital media

³ https://wpi-csm.symplicity.com/events/index.php?

⁴ http://www.bostonpostmortem.org/boston-area-game-companies/

companies. To further illustrate these definitions, examples of these companies we are interested in include:

Subatomic Studios - Subatomic is an independent game developer located in Cambridge, best known for developing the Fieldrunners franchise for iOS products and other platforms.

Blizzard Entertainment - Blizzard is a large, "triple A" (AAA) game studio.

"Triple A" Studios have extremely large budgets for developing games and marketing.

Blizzard is centrally located in Irvine California, but they recruit all over the country.

They are best known for developing the MMO World of Warcraft and other popular franchises like Hearthstone.

FableVision - FableVision is an educational digital media company located in Boston. They produce various forms of digital media such as animations, ebooks, and museum kiosks for a variety of clients.

These companies cater to different audiences and produce different products. As a result, both who the company hires and their hiring practices are different from each other.

About the Career Fair

Dave Ortendahl, a staff member at WPI's CDC, told us that WPI holds career fairs once every semester, the first formal career fair being held in 1992. Initially, most companies recruited through on-campus interviews that students signed up for. Oncampus interviews are still held today, with most of them being scheduled through WPI's Job Finder system. WPI's Job Finder allows students to find listings for internships or co-ops, as well as schedule appointments with the CDC's Staff.

By looking at the lists of attendees for past career fairs, we can see that around 200 companies come to WPI's career fairs every semester.⁵ These companies hire students for all kinds of positions across all majors offered at WPI.

About the Game Industry

Because we are examining how to best connect WPI's IMGD students with potential employers, it is important to understand what sorts of skills these game companies are looking for. Because the game industry is based in computer technology (an ever-changing, fast-growing field) the skills involved in making games are constantly shifting and evolving.

RollerCoaster Tycoon was a computer game released in March of 1999 and required many different tools to create. It was written from scratch with MS Macro Assembler, MS Visual C, and MS DirectX alongside some custom-made programs, while the art assets were created using a very large variety of modelling, rendering and paint packages⁶. This is an example of how early games were made. They required many different programs for not only writing the game, but the graphics themselves required a slew of programs in order to complete the game. Essentially, there was not any software that was specifically made to create games.

In contrast, *Bad Piggies* is a mobile game released in September 2012 by Rovio, known for their *Angry Birds* series. This game was released onto several mobile platforms including Android and iOS. This game utilizes the Unity 3D engine and was produced with Unity⁷, a piece of software that is used to create games and animations.

⁵ https://wpi-csm.symplicity.com/events/index.php?

⁶ http://www.chrissawyergames.com/faq3.htm

⁷ http://unity3d.com/showcase/gallery/games

Many recent games use software like Unity that have specifically been created for making games or animations. Unreal Engine, Autodesk 3DS Max, Autodesk Maya, and Zbrush are all examples of programs that are used for game development.

Looking at this, we can see that there are fewer, but more specialized programs used to make games. Unity and Unreal Engine are two of the main programs used to create games, with Unity being used by 47% of game developers, Unreal Engine accounts for another 13%, while the rest mostly use native code or custom solutions 8. Autodesk products like 3DS Max and Maya are used by both the game industry and visual effects studios like Subatomic Studios 9 and Digital Dimension 10. These programs are constantly being updated with an improved interface and new features. For example, Unity was first released in 2005. By 2014, Unity 5 was already in development 6. As a result, the skills required to make games now are not only dependent on programming knowledge, but also knowledge on how to use these game and animation programs to the fullest, utilizing the latest technology.

Initial Interviews

We sat down with three of WPI's IMGD professors who have worked at game companies, a WPI alumnus currently in the game industry, and a representative of the CDC. We asked for their thoughts and opinions on the reason why game companies were not coming to WPI, through the career fair or some other method, to hire IMGD

8 http://unity3d.com/public-relations

⁹ http://www.autodesk.com/industry/media-entertainment/game-development

¹⁰ http://www.autodesk.com/industry/media-entertainment/film-tv

students and what could be improved to increase the number of hires. All of the notes taken in these interviews can be found in Appendix C of the paper.

Brian Moriarty

Brian Moriarty is a Professor of Practice at WPI. He boasts a large list of achievements such as working at ANALOG Computing as a technical editor, publishing many games and interactive novels such as *Adventure in the 5th Dimension*, *Wishbringer*, and *Beyond Zork*, helped create the game port of Dora the Explorer, and designed a multitude of CD-ROM titles while he was Creative Director at ImaginEngine.

Professor Moriarty immediately wanted to emphasize that currently, the number of opportunities for students in game development is fairly small compared to students majoring in computer science or engineering. However, there are a few game companies that recruit students specifically from WPI. For example, Microsoft hires the three best IMGD students each year. He also said that while game company presence at career fairs is lacking, there are still game companies coming to WPI for other events. He gave examples of upcoming talks from Subatomic Studios and Vicarious Visions.

As far as a reason for the lack of IMGD representation at career fairs, Professor Moriarty said cost was certainly an issue; not only the cost of actually getting a table at the fair, but also the cost of sending a representative to Worcester for companies that are further away. Smaller companies may not be able to afford this and larger ones may not see it as cost-effective.

Professor Moriarty said that in order to counter that issue, game companies need to start perceiving coming to WPI's career fair as "worth it", that companies need to see that coming to the career fair will benefit them. Moriarty believes that the only real way

to do that is to increase the profile of WPI's IMGD program. Over time, if the program graduates many "star students" that go on to produce great games, it may put WPI on companies' radar and they would be more likely to come to our campus. Of course, this is a long-term solution that we cannot work toward in any tangible way during our project's limited time frame.

Keith Zizza

Keith Zizza is a Professor of Practice at WPI and specializes in video game audio. He is a freelance sound designer and has worked with many studios including Warner Brothers, Sega, and Electronic Arts.

Professor Zizza offered his thoughts on the state of the games industry. He told us that these days, there are almost no prominent "mid-sized" game companies; that everything either falls into the category of big AAA developers or small indie studios. This could be a factor in the lack of game companies at WPI's career fairs. Large AAA developers are more interested in people with experience in the industry than students fresh out of school. Small indie companies only employ a handful of people and perhaps simply aren't interested in gaining more employees, or perhaps they are interested and are not aware of WPI as a resource to find talent.

He also mentioned that we should look into some non-traditional game companies, such as those specializing in serious games, or "incubator companies" that offer cheap office space to small indie startups. Serious games are produced to educate users, instead of purely to entertain, but still require the same skillset more traditional games require to be produced. Looking into incubator companies could help us find a number of indie startups that may be looking for someone with IMGD skills.

Britt Snyder

Britt Snyder is a Professor of Practice at WPI. He specializes in traditional and digital painting, and 3D modelling and animation. His paintings have been featured in multiple galleries and exhibitions including Spectrum Illustration Annual and Muddycolor. He was an artist for multiple companies including Rockstar, SONY, Blizzard Entertainment and THQ.

Professor Snyder offered a more pessimistic, but still helpful, view on the problem. He said that while he genuinely thinks that WPI's IMGD program is top-notch, the support for the program from within the school's community and administration feels weak. There seems to be a stigma that IMGD is not a "real major" among students, faculty, and administration that is difficult to overcome. Professor Snyder believes that because of this, the program is not as promoted or publicized as much as it should be.

As far as game company presence at the career fair, Professor Snyder's views were pretty simple: game companies don't come to the career fair because they do not need to. The video game industry is very competitive, so whenever game companies have a position available, there is no shortage of applicants. Game companies do not need to seek out employees at events like career fairs since they already get more than enough interest by just letting the applicants come to them. This is particularly true for artists, who would be trying for the more desirable but fewer positions compared to tech positions. Professor Snyder further offered that he believes that when game companies do come to campus, it is mostly to gain publicity for themselves as opposed to actual interest in hiring students.

Dave Ortendahl

Dave Ortendahl is the Director of Corporate Relations at the WPI CDC. Dave goes to many events involving game companies including Boston Post-Mortem and Game Developers Conference and has worked with WPI's IMGD department to bring multiple guest speakers from the game industry to WPI such as from Vicarious Visions and Subatomic Studios.

When we spoke to Dave, we found that he was very enthusiastic about bringing game companies to campus and has been struggling for years to get these companies to come to our career fairs. He offered opinions similar to what Britt Snyder told us, e.g. the game industry is very competitive and there are simply many more applicants than there are positions. He also pointed out that many game companies practice "just-in-time recruiting" meaning that they hire based on their needs whenever they start a new project. This means that career fairs may not be a practical way for these companies to recruit employees; it is unlikely that a company is looking for new hires around the same time the career fair is taking place. These companies find more value in smaller and more focused networking events, so that they can make strong connections with people on a more personal level.

Dave was also able to give us a more specific example of why companies pass on the career fair. When he coordinated the on-campus event from Vicarious Visions, he asked if they would come to the fair as well, but Vicarious turned him down, saying they were worried about lack of interest and didn't think it would be worth the time and money.

Finally, Dave said that while he will continue to try to get game companies to our campus. He suggested that the best job-hunting strategy for IMGD students is to take

the initiative and use resources like Gamasutra and Linkdln to find employment opportunities.

Ichiro Lambe

Ichiro Lambe is an alumnus from WPI's class of 1998. He is the founder and president of Dejobaan Games LLC., an independent game studio in Boston and he has spoken at multiple events include Penny Arcade Expo, Boston Post Mortem and Game Developers Conference.

We spoke to Ichiro about his thoughts on our career fair problem and asked how he, as a developer, would go about finding new talent for his company. He told us that Dejobaan generally recruits people as they need them rather than on any sort of regular schedule, which is in line with Dave Ortendahl's thoughts on "just-in-time recruiting". He further offered that he had recruited from WPI in the past, just not at the career fair. Instead he sent fliers to WPI students saying that there were positions open, and waited for applications. He also said that while this sort of recruiting generally finds good candidates, he has found that the best way to find talent is to go through connections that he has made. For example, if he was looking for a new employee with a particular skillset, he may ask a WPI professor that he knows to point him toward good students that meet the criteria.

Ichiro believes that these recruiting methods render things like attending career fairs unnecessary for his company. When we asked him for specific reasons as to why his company has never attended one of WPI's career fairs, he said one of the main factors is that he did not know what kind of talent was available. Whenever he is looking to hire, he has a specific skillset in mind, and he has no way of knowing if WPI has

anyone with that skillset. He would need some kind of assurance that attending the career fair wouldn't be a waste of his time and money.

While all of these people have various thoughts on the problem, the common thread seems to be that game companies tend to opt out of career fairs because they have no shortage of applicants for open positions, and they have no guarantee that they will find good candidates if they invest the resources to present at the career fair. If we are to address this problem, we have to find a way to convince these companies otherwise.

Methodology

In this chapter we discuss how we researched and interviewed companies and obtained information on how to better connect these companies with WPI students.

Information Gathering

We decided to start by asking some of the WPI faculty what their thoughts were on the game industry hiring practices. We interviewed Keith Zizza, Brian Moriarty, and Britt Snyder, all of whom are WPI professors that have worked in the game industry. These were done in-person as these professors were all on campus and were readily available for interview. We wanted to get their opinions on the current state of the industry and what could be done to help students connect with IMGD-related companies.

We then contacted someone in charge of the career fairs at WPI's CDC. We sat down and spoke with Dave Ortendhal, who helps coordinate the career fair and speaks with game companies on a regular basis. He told us about what he has done to try to bring game companies to WPI. By doing this, we were able to learn about some of the reasoning behind why many companies are recruiting at WPI.

We also needed to understand what sort of companies IMGD students wanted to work for upon graduating. We spoke to several WPI IMGD students to get an idea of the perception of the IMGD company representation at the career fairs. We then decided to design a survey that we would distribute to all IMGD majors, asking what, specifically, they were interested in doing professionally, and some questions about their

experiences at past WPI career fairs (Appendix A). We discussed at length with our advisor what the exact nature of the survey questions should be as well as how best to distribute it in order to get the most responses. We had to keep the survey and the accompanying message brief enough to maintain students' interest. We then had to get approval from WPI in order to send out the survey. We had to distribute this survey multiple times in order to get the most responses we could. By looking at what IMGD students wanted to do upon graduating, we were able to narrow down what sorts of companies we should contact about coming to WPI's career fairs.

Using the Boston Post Mortem website, we were able to compile a list of contact information for many game companies.¹¹ We also included information on additional game companies that we found through Internet research. We included information such as what kind of media these companies produced, their size, address, phone number, email, and alternative ways to contact them.

We decided to do some research on the career fair itself in order to see how it has changed throughout the years. We once again contacted Dave Ortendahl in order to learn where we could find out about the history of the career fair. We asked about the date and size of the first career fair in order to see how it had changed over the years. We also tried to find hiring statistics, such as which WPI students have been hired and what kind of companies hired them. This information was not as readily available as the CDC does not keep detailed records of this kind of information.

We also did some research on how game development has changed through the years. We looked at several very early computer games as well as games that were

¹¹ http://www.bostonpostmortem.org/boston-area-game-companies/

currently being made, and examined how the skillsets required for the process have changed over time.

Initial Planning

Although our primary goal was to bring new companies to the career fair, after conducting the faculty interviews, we began to think that the career fair may not be the best way to connect IMGD students with these companies. Much of what the professors stated indicated that career fairs are simply not helpful to these companies. We brainstormed some alternate solutions, including sending WPI students to large events with multiple game companies, hosting a smaller, IMGD-focused career fair at WPI, and helping create a job fair event during Penny Arcade Expo in Boston (a large gaming convention where game developers from around the country show off games and hold discussion panels). These solutions, while helpful, would come with their own set of problems. Sending WPI students to large events is an expensive proposition, and may not be seen as cost-effective by the administration. A smaller career fair could work, but we may inadvertently attract job seekers from outside of WPI. This may decrease the chances for WPI IMGD students to be hired or obtain internships. Creating a job fair event at Penny Arcade Expo will likely have the same effect as having a small career fair, except with a lot more people from the Boston area.

After careful consideration, we decided to shift our focus from being exclusively about bringing companies to our larger career fair to exploring a range of ideas to better connect IMGD-related companies with IMGD students. We accomplished this through interviews with company representatives. Our reasoning was that if we could better

understand how these companies go about searching for new hires and interns, then we could find ways to put IMGD students on their radar.

In order to accomplish this goal, one major concern was figuring out how to minimize the issues concerning cost and distance. Since some game companies could be as far as the west coast, we had to decide on a specific range so that the companies we contacted would not have to take an excessive amount of time to commute to WPI. We decided to find companies that were within a two-hour driving distance from Worcester. With this radius in mind, we looked into companies in Massachusetts, Connecticut, Vermont, New Hampshire, and Rhode Island. Regarding the cost issue, not only does it consume company resources to come and set up at the career fair, but there is also a fee that companies have to pay (up to \$700) to WPI if they want to be at the career fair. Based on our initial interviews, we concluded that we would have a much better chance of convincing these companies to come if we could get the fee reduced or waived.

Execution

After deciding on our approach, we had to get in touch with these companies. We had to find a variety of ways to contact companies, as many of them did not answer our initial emails. At first, we used the information compiled from our search results, various talks that were hosted at WPI, and personal contacts in order to get as many email addresses as we could. Once we finally had our search results, we began drafting an email designed to garner the most responses. We sent these emails to our adviser so that he could look over them and give us suggestions as to what should be changed. He pointed out that the language we used made it feel more like a sales pitch than a

research inquiry. In other words, we needed to frame our message as "How can we help you find new talent?" rather than "Please come to our career fair". We tweaked the message until we felt it conveyed the tone we were aiming for and then prepared to send it out.

Using the search results we had compiled, we sent out emails to all the companies for which we had contact information. In fact, we sent these emails out to the same companies multiple times in order to maximize the potential of getting a response. We received many "no" answers from companies, but were able to schedule a few phone interviews. Most of our emails went unanswered, so we tried using social networking platforms such as Twitter instead. We went to several companies' Twitter pages and sent them a tweet, hoping to get their attention. We found that companies were much more responsive when contacted through social media sites. Emails have a tendency of getting lost and so do not get read as a result. Companies' Twitter pages on the other hand, are usually maintained by someone whose job it is to connect and communicate with the community, so getting a response this way is generally more fruitful.

Game Companies

During interviews with game companies, we tried to ask a few general questions about the companies' hiring policies to understand why they have not tried to get in contact with WPI when looking for new hires. We also asked if there were any other companies that we could try contacting that could use IMGD students' skills. During the project, two game studios had come to WPI to host talk sessions: Vicarious Visions and Subatomic Studios. We spoke with them after their talks to gain a better understanding

of their hiring policies and also to try to get them to come to WPI's career fairs.

Vicarious Visions decided it would not be a good idea to come because they believed that it would not be worth their time to come. Their reasoning was that even though there may be some students that are interested in their company and want to work for them, most students that attend these events may not be and they may have a hard time discerning who would be a good candidate. Subatomic Studios on the other hand, had come to a career fair in the past and said they would be happy to come back, as long as the registration fee was waived.

WPI has a Game Development Association (GDA). This club often holds events such as talks with members of the game industry, game jams where students are challenged to make a game within a short period of time, events for students to show off their games, and discussions on what makes a good game. The GDA occasionally hosts a small gathering of WPI alumni involved in the game industry to host brief talks. We went to one of these gatherings in order to ask a few questions about how the alumni essentially "got their foot into the door". We also got some information on other people we could try contacting.

While meeting people on campus and talking with some over the phone was proving very useful, we decided it would be good to try a more aggressive approach: actually going out and meeting with people face-to-face at Boston Post Mortem. Boston Post Mortem is a monthly event held in Boston where local game developers gather to listen to a guest speaker, or just network and socialize. We took the train from Worcester to downtown Boston, and after navigating the subway lines, we arrived at Moksa, where the event was taking place. The event was held a dedicated open space

in the back of the building. Many people, both students and industry veterans, were mingling with one another. Originally, there was supposed to be a speaker, but the heavy snow kept her from traveling, so she was unable to make it, and the event became a mixer as a result. We talked with students from other colleges and learned about what they were working on and how their school's program functioned. There was also a dedicated timeframe for where people could make announcements on upcoming events or game company job openings. We learned about several of the industry members and were able to get contact information from for GSN games. We also talked in person with Benjamin Taylor, a representative from Hasbro who has worked at other companies like Electronic Arts, and ask him about hiring practices in the game industry and the potential reasoning as to why do companies go or do not go to career fairs.

Animation and Digital Media Companies

As previously mentioned, we tried to use a companies' Twitter page in order to get in direct contact with them because most of our emails went unanswered. One of the first companies for which we tried this method was FableVision. We had previously tried contacting FableVision through multiple emails using their contact page on their website. When these messages went unanswered, we realized we had to find alternate ways of reaching out to people. We sent FableVision a Tweet (Appendix C) and after a few days, they responded with an email address of someone we could contact. We sent an email to the address given to us and waited for their response. A week later, they sent an email back to us in order to set up a phone interview during that week. We conducted the phone interview with them and asked a few questions about the company's hiring practices.

This experience was important to the project because it showed that companies were very willing to talk if you could get their attention. Before we had assumed many companies did not respond to our emails because they did not have time or were not interested in helping two students they did not know with their school project. We realized that the tricky part is getting noticed, and emails are often not the best way to do this. Full transcripts of the e-mails and messages we sent out over the course of this project can be found in Appendix B.

Companies at the Career Fair

Although there are not many companies looking for IMGD students, there are plenty of companies at the career fair that look for students in fields such as engineering and science. These companies come back to the career fair year after year. As a result, we wanted to know what was bringing these companies to back to the career fair and how we could try to entice other companies to come, like game companies. We went to WPI's winter career fair and registered for the event. We were able to speak to several companies, but only very briefly on the subject due to time constraints. However, multiple company representatives gave us some contact information so we could follow up and interview them more thoroughly at a later date.

We sent emails to these company representatives shortly after. Even though we knew that social media outlets like Twitter would be a better way to contact these companies, these emails were to a specific person in that company, someone that had already met us and talked to us. We were able to get a response and were able set up a phone interview and talk to them. We asked them about the history of their career fair experience and how they believe we could improve the career fair for their company.

We tried to set interview dates and times with the company representatives that we had met. Unfortunately, were unable to interview any of our contacts as they either did not respond to our requests at the time of writing this paper, or missed our scheduled time of interview and did not reschedule with us.

Findings

After we had established and substantiated the problem of the disconnect between WPI's IMGD students and their potential employers we set about gathering information to try to come up with a solution. The main way we went about this was conducting interviews with representatives of companies that we thought IMGD students may be interested in working with.

Interviews with Various Media Companies

The following sections summarize what we learned from our interviews with various members of the game industry and other media companies. Our full notes from each interview can be found in Appendix C.

Jono Forbes – Defective Studios

Jono Forbes is a founding member of Defective Studios, a small indie game developer that specializes in virtual reality technology. Their latest project is VRMT, a virtual reality worldbuilding tool.

Jono told us that even though Defective Studios is very small (with only 2-6 people typically on staff), they still regularly give internships to college students. He further said that students almost always approach them about internships, not the other way around. For example, when they give demos at schools, students will talk to them and express interest in their work, often leading to an internship. Jono told us that he was definitely open to bringing Defective Studios to WPI. There is no particular reason

they have never come to campus before; they have simply never been asked or given the opportunity. He explained that they do not typically search for opportunities to visit schools, but are open to it if people are interested.

Jono also gave us some insight as to how companies similar to Defective Studios generally go about hiring new talent. He said that most game companies do bring on interns from time to time even if they are small. It is a cost-effective way to get some extra help and most people in the game industry are always open to working with new people. He also told us that these companies like to keep a low profile when looking for full-time hires, because they usually only have one or two positions available and they do not want to be flooded with applicants that they cannot hire. For this reason, they tend to hire though their industry contacts rather than going out and publicly searching for new hires.

Sarah Ditkoff - FableVision

Sarah Ditkoff is the Communication and Development Strategist for FableVision, a digital media company located in Boston. FableVision creates animations, e-books, games, museum kiosks, and more for a wide range of clients.

Sarah explained that FableVision only has around 30 full time employees and they hire freelance artists and developers based on their needs for their current project. They almost always hire from the same pool of freelancers (why go outside the "family" if you do not have to?) but on the occasions when they do need new hires, they usually go with people who have good personal recommendations. When we asked if FableVision ever hired anyone "fresh out of school", Sarah told us that while there are definitely certain positions more suited to entry-level hires than others, professional

experience is not as valuable to them as genuine interest in the subject matter and a collaborative, creative personality.

FableVision has two different internship programs; marketing and animation. For these positions, the vast majority of applicants come through their website. They do little outreach to find candidates because they get plenty of applicants by just relying on word of mouth and events like the open houses that they hold occasionally. This is also why they have not explored options like attending career fairs. We asked what would need to happen in order for them to reach out for new hires. Sarah said that the only scenario she could think of is if they got a massive new project that for some reason required significantly more staff than they had available. Even if that were to happen, it is still unlikely that the timing would align with WPI's career fair.

Ben Taylor - Hasbro

Ben Taylor is a technical designer currently working for Hasbro. He has also been employed by EA, Nexon Korea, and was on IGN's web series "The Next Game Boss".

Ben started by going over what game companies look for in new hires. He emphasized again and again that these types of companies do not care about what sort of degree you have or how good your resume looks. They are only interested in what you can do, and the best way to show them is to have something that you made that you can quickly show to prove that you have the skill they are looking for. He further explained that college students and recent graduates can be especially valuable to game companies in need of technical skills that are constantly evolving. People that

have recently been in school will have the most up-to-date knowledge of these skills. In other words, employers want to hire people that have skills that employers do not have.

After he told us what game companies look for in an applicant, we asked him to expand upon how they tend to go about actually finding these candidates. He said that some colleges, including WPI, have a standing relationship with Hasbro, and that they will often go to these campuses for events like career fairs to recruit students. In fact, Hasbro has been present at several of WPI's career fairs in the past. However, he went on to say that even though Hasbro does attend career fairs, this is by no means their main recruitment method. They generally get better results through connections and networking. As mentioned earlier, the best "resume" an applicant can have is a portfolio of things he has made, so finding an opportunity to show this portfolio off is key. Ben believes that best way to do this is to make the effort to attend gaming conferences and events like Boston Post Mortem, where there is a better chance of getting significant face-to-face time with someone in the industry than at a career fair.

Gus Brewer – GSN Games

Gus Brewer is a University Recruiter for GSN Games, a sister company to the Game Show Network. GSN creates web and mobile games based on various game shows and casino games.

The information Gus gave us showed that GSN's hiring practices are very different from the other companies we spoke with. While many other media companies hire on a project-by-project basis, the majority of GSN's workers are full-time. They employ roughly 450 people across all of their offices, along with a handful of freelancers. They also have an internship program that employs around 20 students at

a time. Unlike the other companies we spoke with that said they find most of their employees through networking connections, GSN recruits aggressively year-round. They regularly visit universities to recruit students and are constantly collecting resumes and contacting what Gus called "passive candidates", or candidates that GSN is interested in hiring but have not reached out to them in search of a job. Gus told us that GSN would definitely consider coming to WPI in the future, and that the main reason they have never been before is that no one from the school has reached out to them.

Observations from WPI's Career Fair

We wanted to better understand whether or not the career fair is a good avenue for IMGD companies to connect with students, so I (Kevin) went to WPI's spring career fair as a student looking for prospective job or internship opportunities. These are some of my observations from the event itself.

The event is very crowded. Many well-dressed students arrive early to wait in the long line for registration. Students are given the floor plans which show where companies are located in the gymnasium where the fair takes place. Most of the companies that have been listed have fairly large profiles. Google, PepsiCo- Frito Lay, Verizon, and Kayak are some of the standout names.

The career fair is extremely loud and crowded. There are hundreds of students with around 200 companies present, each one with their own booth. The booths themselves were single tables, though the displays on each of them were different.

Some booths had large banners with company information and positions that they were looking to fill, some had small gifts with their company logo printed on them, some had

large displays that surrounded the booth, and still others had laptops or tablets playing videos. Some booths had large lines of students waiting to talk to a company representative, while others had few or no students try to approach them. I had arrived early enough that I knew which companies I wanted to talk to. However, because of the sheer number of students attending, there were still a few companies on my list that I was not able to interact with.

When speaking with a company representative, I would usually start with a question about either the company's work opportunities or what kind of people they were looking for. The company representative I was talking to would generally answer my question and then give more details. I would ask them a few brief questions and then I would then give them my résumé, while they would give me a business card. I would then leave and find the next company on my list. This interaction rarely takes longer than ten minutes. I eventually lost count of how many people I spoke to and if I did not have my pre-planned list, I would have forgotten which companies I had talked to in the chaos.

I believe the company representatives are in similar situations themselves.

Whereas students can leave the career fair early, company representatives have to stay for the entire career fair. They are approached by dozens of students during the duration of the career fair and obtain all of their résumés. It would probably be hard to make personal distinctions between students as a result.

When William and I spoke with FableVision, they emphasized that they liked strong personal connections and would hire based on their personal interactions.

Events like the career fair do not offer much of an opportunity to personally interact with a company representative. Usually the student will talk with the representative for a few minutes before handing off their résumé and moving to another company's booth in order to talk to them. The exchange is very brief and with the large number of students that these representatives talk to and get résumés from, it is almost impossible to foster that strong personal connection that places like FableVision and other creatively-oriented companies strive for. As a result, career fairs are a suboptimal choice for companies like these.

Brief Interviews with Companies Attending the Career Fair

As stated earlier, we had the opportunity to chat with a few of the companies attending the career fair. These talks were not as in-depth as our previous interviews because these companies were trying to speak to as many students as possible in a relatively short amount of time. Despite the time constraints, we were able to get in a few questions about these companies' experience at WPI's career fairs and their recruiting process in general.

It is also important to note that these companies are not IMGD companies, but we hope that by finding out how they benefit from the career fair, we can find ways to convince IMGD companies to come as well.

Demandware:

Demandware is a software company that specializes in creating e-commerce platforms like shopping websites. The company has been coming to WPI's career fairs for the past 3 years, and hire computer science students with extensive software

knowledge. They said that they keep coming back to the career fair because of the consistently good quality of students who have experience working in a project-based environment.

Raybeam:

Raybeam is a consulting and engineering firm with offices in Massachusetts and California. They have been coming to WPI's career fair for 4 years now to recruit students with programming knowledge. They told us that the career fair has proved beneficial for them as they recruit at least one quality candidate from WPI each year.

Cimpress:

Cimpress is a printing business that makes cards and other labeled goods. They come to WPI's career fair looking for software engineers with a firm understanding of concepts like object-oriented programming who are also collaborative and team oriented. They told us that they have been coming for 10 years now and tend to hire a lot of WPI students each year, though they did not give us a more specific number. They cite the high quality of students as their main reason for attending.

Kiva Systems:

Kiva Systems is a subsidiary of Amazon that specializes in creating automation technology used in Amazon's fulfillment centers. They have been coming to the career fair for 3 years recruiting students. They continue to come back because the students they find here have a good hybrid knowledge of robotics and software engineering and they seem to be a "good fit" for the company in general.

Based on these brief interviews, it is easy to see the common thread: WPI consistently graduates desirable job candidates, making the career fair a good option for companies looking to recruit students. We will expand on this more in the conclusions section.

Observations from Boston Post Mortem

As part of our efforts to learn more about the inner workings of the game industry, we attended the February 2015 Boston Post Mortem. As mentioned earlier, Boston Post Mortem is an event held monthly in Boston where local game developers get together to mingle and talk about their current projects. Because almost everyone we interviewed mentioned that they hire the most people through networking and connections, we decided we should attend one of these networking events to better understand how this process worked.

The event was held in a sushi bar called Moksa. The atmosphere was very casual; people just stood around, ordered drinks, and chatted with one another about games. There had originally been a guest speaker scheduled for the event, but the harsh weather prevented her from coming. The event became a simple mixer as a result. There were several members of the game industry in attendance. Some were from small indie studios hoping to spread the word about their new game, while others were representatives of larger companies trying to get more familiar with the local game development scene.

There was a small portion of the evening dedicated to announcements. People at the event were given the opportunity to stand in front of the group and announce anything they wanted to mention. Some people promoted projects they were working on, some were looking to hire developers, some were looking to be hired by developers, and some promoted other upcoming game-related events.

We also noticed that there were several students from various schools in the area at the event. We spoke to them and found, unsurprisingly, that they were hoping to network and make contacts that may help them break into the industry in the future.

One student even gave us his contact information in case we ever wanted his help on a future development project.

We ran into two other WPI students while we were there. The said that they were surprised to see us because they rarely see other WPI students at these sorts of events. They explained that most students do not know about them until it is too late because they are not widely publicized on campus.

Developer Talks at WPI

During the course of our research, two game companies, Vicarious Visions and Subatomic Studios, came to campus to give talks on the game industry for IMGD students. We attended these talks in order to not only get in contact with these companies to help with our research, but also to observe this sort of event as an alternative way to connect IMGD students to game companies outside of the career fair. On both occasions, representatives of the company came and gave a presentation on what they do and gave advice on how to best prepare oneself for a job in the industry. They then held an extensive question and answer session with the students and stuck around afterward to speak with anyone who wanted to talk further. While these

companies were not directly recruiting or offering jobs, this event did give students the opportunity to get to know people in the game industry and establish connections that may help them in future job hunts.

We got in touch with representatives from both Subatomic Studios and Vicarious Visions after their respective talks to ask them about potentially attending WPI's career fair in the future. Vicarious Visions said that the main reason that they did not want to attend was that they could not be certain that there would be enough interest from students to make it worth their time and resources. Subatomic Studios, however, said that they may be interested in coming, but only if it did not cost them anything to attend, i.e. if their registration fee was waived.

IMGD Student Survey

As mentioned in the Methodology chapter, we designed and distributed a survey for the IMGD student body in order to get an idea of how they viewed this problem.

Though we did not get quite as many responses as we would have liked, we did get a total of 82, which we feel is a sufficient number for drawing conclusions from the results.

In the survey, we first asked students what type of game-related work they were most interested in. The most popular responses were "Character modeling/rigging", "General Art", and "Al in games". The second question asked if they would be interested in IMGD-related work outside of the video game industry. Only 4 of 82 respondents skipped this question, effectively answering "no", suggesting that most IMGD students are open to the idea. The most popular alternate fields were "Video Production" and "Serious Games".

The next couple of questions were perhaps the most important. They would reveal whether the lack of IMGD companies at the career fair was indeed a widely perceived issue and worth investigating. We first asked "In past WPI career fairs, have you found any opportunities for IMGD-related jobs or internships?". Out of 81 responses, only 9 were "Yes". Furthermore, we asked: "In past WPI career fairs, have you found any opportunities for ART-related jobs or internships?", and got even fewer positive responses; only 5 out of 78. This suggests that this is in fact a prevalent issue that needs addressing.

We also asked if there were any specific companies that students would like to see at the career fair. This was an open-ended question, and most of the responses were some variation on "anything" or examples of large, popular game companies that we could not feasibly bring to the career fair because they are not located anywhere near Boston, like Valve or Nintendo. We likely would have gotten better responses had we specified that we were interested in Boston-area game companies. Refer to Appendix A for a complete record of the survey questions and responses.

Overall, we found that while attending events like career fairs is an impractical recruitment method for game companies, they do reach out in other ways. We believe that are things that WPI could do to help IMGD students connect with these companies through these alternate means.

Conclusion

Career fairs are a suboptimal choice for game companies looking for new hires.

The costs associated with career fairs are a big deterrent as smaller companies may not have enough resources to spare for a table at the career fair, and larger game companies may not see it as cost-effective because they have no guarantee that they will find the talent they are looking for. More traditional companies usually have a regular hiring season, and as a result the dates for the career fair are set based on that season. Since game companies most often use a project-by-project hiring schedule, the dates for the career fair and the dates that game company goes to look for hires on a project are usually vastly different.

However, one of the biggest reasons that IMGD related companies do not attend career fairs is that these fairs do not offer the opportunity for students to personally engage with a company representative. At career fair, a student will usually speak with the representative for only a few minutes before handing off his résumé and moving on to another company's booth. The exchange is usually very brief because of the large number of students that these representatives speak with. It is almost impossible to foster a strong personal connection that game companies have stated that they are looking for. Also, these companies have stated that they like being able to look at a candidate's portfolio while deciding if they are interested. If a company representative were to meet with a large number of students, each with their own portfolio, they wouldn't have time to give each portfolio sufficient attention, and they would all just run together as they glanced over more and more work. Overall though, game companies prefer personal connections and recommendations when looking for new hires. While

WPI does its best to try to bring these types of companies to WPI, the administration does not provide any way for students to try and establish these connections. Right now, the best way for students to reach out and contact these companies is either through going to networking events, or having a large social media presence.

Despite these problems, there are definitely companies that utilize skills learned in IMGD classes that could benefit from coming to these career fairs. Our interview with GSN Games made us realize that there are many companies that make games that are simply less exciting or interesting to develop than the games that most IMGD students aspire to work on. For this reason, these companies don't get nearly as many applicants and could benefit from reaching out to students directly through career fairs. It is difficult to differentiate the "sexy" game companies from the "boring" ones objectively, but most would agree that developing the next Assassin's Creed or a novel and innovative indie game is much more interesting than working on virtual slot machines for mobile devices at a company like GSN Games. In fact, one of the questions on our student survey asked respondents to name a company they would like to see at the career fair (Appendix A). While most of the responses were unrealistic as potential career fair attendees, they did reveal the sort of companies students aspire to work for. Many people named places like Valve, Nintendo, and Ubisoft, companies responsible for many of each year's big, exciting console releases. These sorts of places don't need career fairs because they get plenty of interest just by being "cool". GSN Games and others like it, however, could benefit greatly from recruiting at schools, and although these places will not be students' first choice of career, these jobs could act as a

stepping stone, a way to get their foot in the door so they could get their dream job in the future.

Recommendations

We feel we have discovered the main reasons that game companies do not come to career fairs and connect with WPI students. The question now becomes what can be done in the future to help foster this connection between WPI and IMGD related companies.

Expand Reach

We mentioned how there are IMGD companies that are a good match for career fairs. GSN Games is one of them. Their games are simpler in nature and focused on offering quick, convenient entertainment rather than deep or interesting gameplay. In our interview with GSN Games, they had expressed interest in coming to WPI's career fairs. If we could get WPI's Career Development Center in contact with GSN Games, and Gus Brewer specifically, odds are that they would come to future WPI career fairs. However, WPI should not just stop there. There are many other companies like GSN Games, which focus on producing many simple mobile games instead of one or two larger games. We could try to learn what other quantity-focused, "boring" game publishers are out there looking to hire developers. We could even ask Gus Brewer or someone else at GSN Games if they know about any other game companies like theirs. This means we will have a larger list of companies to contact and try to bring to WPI's career fairs and help students find opportunities.

Another option is to broaden our focus outside the game industry and find other companies that can utilize IMGD related skills. We noticed that when IMGD students consider the career fair, they tend to focus on whether or not there are game companies present, not if companies are hiring students with IMGD skills. This is also a problem when bringing companies to the career fair. There are plenty of companies out there that can use IMGD related skills. For example, while FableVision does make games, they also produce other forms of digital media like 2D and 3D animations. The skills required to produce these animations are taught in several WPI courses. 3D animations also use 3D models. WPI has courses dedicated to 3D modelling, as well as game audio, concept art, and digital design; all of which have uses outside of the game industry. By expanding our scope to look for companies that utilize these skills, we can increase the number of companies that come to the career fair looking for IMGD skillsets. Some companies we could try looking into are advertising firms. Many television advertisements utilize special effects. These special effects are likely to be computer generated and computer animated. The aforementioned animation skills are likely to be critical in this process. Sound effects in advertising may have to be digitally generated. A student studying game audio could use those skills in this environment. Digital artists could help create a logo used in an advertisement. The results from our survey show that many IMGD students would be interested in fields beyond game development. Odds are, there are plenty of these types of companies, especially in large cities, that could be contacted to come to future WPI career fairs and they could potentially offer the opportunities WPI IMGD students are searching for.

IMGD Newsletter/Bulletin

WPI students rarely go to events like Boston Post Mortem, despite being one of the best networking events in the area. This seems to be mostly because they are uniformed on the dates and times for the event and so do not schedule time to go.

There are also plenty of talks hosted in Boston pertaining to game development, as well as "game jam", events, which are where people have a limited amount of time to make a simple game from scratch. All of these are great networking opportunities, which are crucial when trying to find a job in the game industry. If WPI students could be better informed about these events, they would have a better chance at finding a job opportunity.

We believe that WPI and the IMGD program should take an active role in informing students of these sorts of events. Sending emails about these events to student email accounts is probably the easiest option. Students are likely to check their emails often, so they will likely notice any emails about future events. However, one potential problem is that when events are scheduled weeks in advance, it is likely that the student may end up forgetting about the event and not go. A solution for this could be either creating a weekly or monthly email newsletter that is sent out to all IMGD students, or an online bulletin board of upcoming events that is accessible by any student.

The newsletter can be designed as a list of events that are happening either during the week or the month, like a calendar, with the events that are happening earlier at the top of the list. It could contain the name of the event, a brief description, and the time, date, and location. It could also contain a link to the website where the event was

originally announced if someone wanted more details about the event. If any new events are announced, a separate email can be sent out about it, and the next newsletter could be include the event, provided it has not yet occurred.

An online bulletin board could work just as well. There could be a webpage which is dedicated to listing upcoming events. The link to the page could be sent at the start of each WPI term with a reminder that students bookmark the page. The page could have separate sections for different kinds of events, such as a guest speaker, game jam, or networking event. There could be a list in each section, where the name, date, time, and location would be shown. If the event is clicked or hovered over, it would display a brief description of the event which could then have a link to the website with more detailed information on the event. The events could be displayed in chronological order, with an earlier event closer to the top of the list. As details for new events are found out, they would be added to the bulletin board. The site could also be structured like a calendar. Using something like Google Calendar, days on the calendar could have general information on an event, then link to the website with more details on the event itself. The website could be taken even further by having a separate part of the webpage be dedicated to past events. People that went to the event can leave reviews or testimonials on the event's atmosphere, observations, whether they would go back, etc.

Another option could be combining both the bulletin board and newsletter. The bulletin board would hold information and links to all upcoming events and could be designed with separate sections or just a calendar as previously detailed. The newsletter sent out to students would take one large upcoming event and several smaller events and feature them with names, dates, times, locations and brief

descriptions of the events. Students could click on a link on the newsletter that would bring them to the bulletin board's webpage to get more information about future events. They could also click the event's link and be brought to its website.

As for support, we think that it would be best if both the IMGD program at WPI and WPI's GDA worked together in order to make the newsletter or bulletin board a success. The IMGD department would send emails to the students, publicizing the events and informing students of the newsletter or website. We think the best way to go about this would be to have a designated IMGD faculty member be in charge of constructing and distributing the newsletter either each month or every two weeks. This position could be appointed by the IMGD steering committee or simply be a volunteer post. While this faculty member would ultimately control what goes in the newsletter, students and other faculty members could e-mail them with suggestions if they hear about an upcoming event that the student body should know about. The GDA would likely take an active role in this part of the process. If it was decided that the online bulletin board idea is better, it would work much the same way. A member of the IMGD faculty would be the administrator of the page and be expected to maintain it by posting about all major upcoming events, but students and other faculty would also be able to post about any other events they hear about. This page could be its own website or something as simple as a Facebook group. If the school or IMGD department wanted to take it a step further, it could organize trips and arrange transportation to some of the larger events to make it easier for students to attend. These could even be coordinated with other Worcester schools with game development programs like Becker. However,

we realize that this may be seen as too costly in terms of both time and money for the school, so we see it as more of a "stretch goal".

Though we began this project hoping to bring more opportunities for IMGD students to our career fair, we have realized that this may be close to impossible. However, we have discovered that there is definitely more that WPI could be doing to help its students connect with the companies that they hope to work for. Game development is a unique industry and getting your foot in the door requires a unique approach. The methods used to get students in other fields started in the professional world will not work for IMGD students, so the school must adapt if it hopes to help them.

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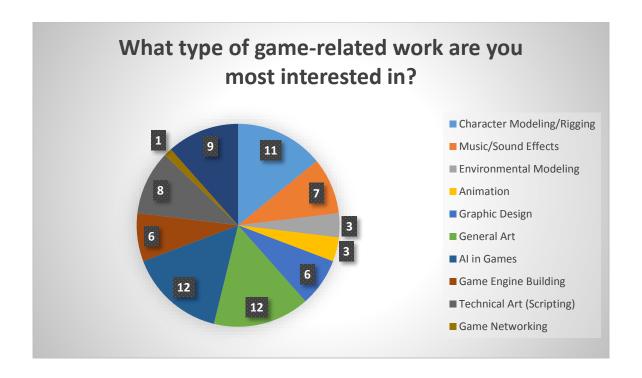
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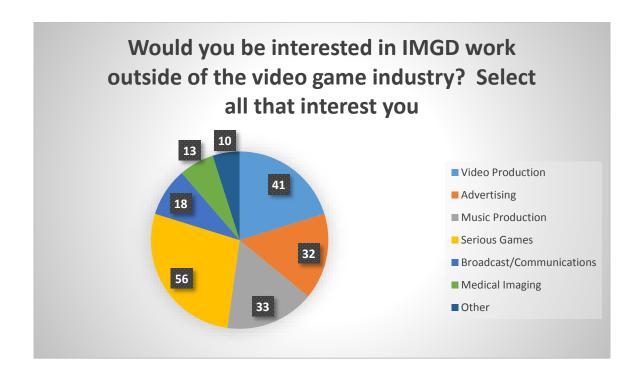
Appendix A - Survey Questions and Response Data

- What type of game-related work are you most interested in? Choose one (78
 Answers)
- Character modeling /rigging (11)
- Music/Sound effects (7)
- Environmental Modelling (3)
- Animation (3)
- Graphic Design (6)
- General art (12)
- Al in games (12)
- Game engine building (6)
- Technical art (Scripting) (8)
- Game Networking (1)
- Other (9)
 - o "Everything"
 - o "General Tech/Design"
 - "HTML5 Games"
 - "Level Design"
 - o "Content Design"

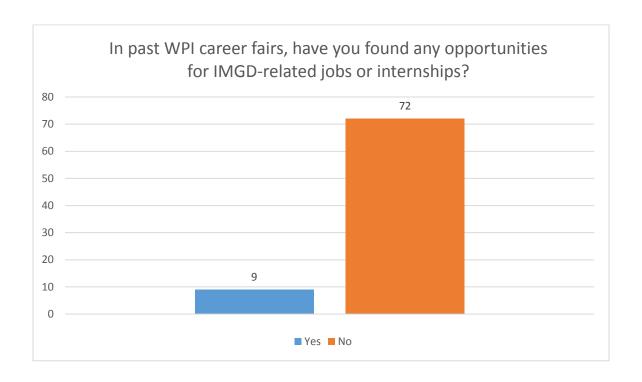


- Would you be interested in IMGD work outside of the video game industry? Select all that interest you. (78 Answers)
- Video Production (41)
- Advertising (32)
- Music production (33)
- Serious Games (56)
- Broadcast/Communications (18)
- Medical Imaging (13)
- Other (write-in) (10)
 - "graphic/web design (outside of games industry)"
 - o "Education"
 - "Interactive media installations for education and informational uses"

- o "Theatrical design"
- o "no"
- "graphic/web design (outside of games industry)" *Not a mistake; we got this exact response twice
- "Non-digital games"
- o "Software Engineering"
- o "Storywriting"
- o "Game engine architecture" *I don't think this guy understood the question

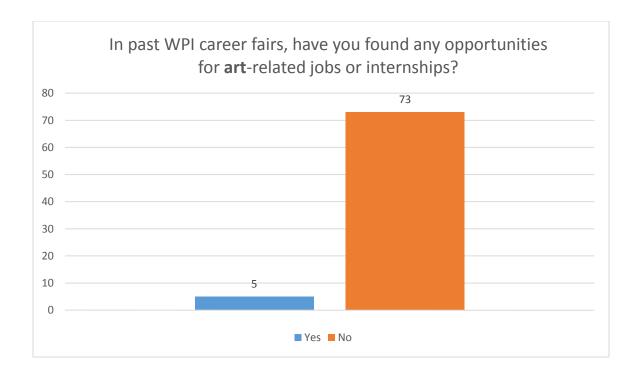


- 3. In past WPI career fairs, have you found any opportunities for IMGD-related jobs or internships?
- Yes (9)
- No (72)



- 4. If yes, what was the company or organisation?
- "Turbine, Hitpoint"
- "Microsoft"
- "eMagination"
- "Subatomic Studios"
- "eMagination summer camps (job was as a summer course instructor for levelbuilding in Unreal Engine)"
- "Hasbro"
- "Microsoft"
- "In-person interview at Subatomic Studios last year. They remembered me from the career fair 2 years ago.

- 5. In past WPI career fairs, have you found any opportunities for art-related jobs or internships?
- Yes (5)
- No (73)



- 6. If yes, what was the company or organisation?
- "Turbine, Hitpoint"
- "It was a graphic design position one time"
- "Often recruiters will say there are offers in the marketing department but they never have business cards or contact information for that sector"

7.	Is there a specific IMGD-related company you would like to see at the career
	fair?
	"Literally any."
	• "Anything"



- "anything is fine"
- "Valve"
- "Any of them."
- "Valve"
- "Anything, just anything:/"
- "Nintendo"
- "Square Enix"
- "Bethesda Softworks"
- "Any Boston-based game company. E.g. Rockstar"
- "Bethesda"
- "Ubisoft"
- "Harmonix"
- "Unity3D"
- "Valve"
- "Really any local dev studio"
- "INSOMNIA!, Blizzard, Bungie, 38 Studios"
- "Naughty Dog, Sony"
- "Blizzard"

- "Valve, AreaNet, ...EA (I guess?)
- "Anything that makes games"
- "Bungie"
- "Demiurge"
- "Nein"
- "N/A"
- "at least one~!"
- "Telltale Games, EA, Blizzard, Activision, Atari, Atlus, Microsoft, Google,
 Bethesda, Bioware, Capcom, Disney, Double Fine, Epic, Gameloft, Hasbro,
 Sony, NaughtyDog, Obsidian, Playfish, Playdom, Popcap, Riot, Rockstar,
 Sega, SquareEnix, Ubisoft, Valve, WB Games,"
- "Turbine"
- "Any game companies."
- "valve, blizzard, EA, Nintendo"
- "Harmonix"
- "Valve"
- "Valve"
- "Disruptor Beam, Hit Point, Riot,"
- "Turbine Inc."
- "I'd love to see both indie companies as well as AAA companies"
- "TellTale Games"
- "Rockstar"
- "Epic, blizzard entertainment, ubisoft,"

- "Electronic Arts"
- "Many of the Indie studios in Boston. And large AAA Studios"
- "Some that doesn't just apply to video games, also management"
- "Square Enix"
- "Blizzard Entertainment. They went to the MIT career fair the weekend after
 BFIG. Talk to Cat Kiengsiri, the East Coast recruiting coordinator."

Appendix B - Various E-mails and Messages

1st draft of our e-mail requesting interviews:

"We are students at Worcester Polytechnic Institute currently working to connect our

IMGD (Interactive Media and Game Development) students with companies like yours

that may have work opportunities related to their interests.

WPI's IMGD program is ranked number six in the country by the Princeton Review and

produces dozens of talented students every year. We believe that your company could

benefit from recruiting these students from our school.

WPI has two career fairs each year and often hosts other events like guest lectures that

help students find companies interested in their skillsets.

We were hoping that we could discuss this further with a company representative and

see what we can do to get "company name" to come to our campus. We can talk either

in person, through a Skype call, phone call, or email; whatever is most convenient.

Thanks for your time,

Emory Blackstone

Kevin Zhao"

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2nd draft (the one we actually sent out):

"We are students at Worcester Polytechnic Institute researching how to best connect our IMGD (Interactive Media and Game Development) students with companies like yours that may have work opportunities related to their interests.

WPI hosts two career fairs each year with dozens of different companies in attendance, but there is a notable lack of companies like yours. We are conducting research as to why this is and also trying to determine what might be done to make it easier for companies such as yours to come to our university.

Would it be possible that we might conduct a short interview with a company representative? We can talk either in person, through a Skype call, phone call, or email; whatever is most convenient.

Thank you so much for your time and consideration,

Emory Blackstone

Kevin Zhao"

The Tweet we sent to various companies requesting interviews:

"Hi, I am a student at @WPI researching your company for our students. Could I talk to someone to discuss this further?"

Appendix C – Notes from Interviews

Keith Zizza

- Believes game industry is unstable
- There's Indies, and AAA, but no middle ground
- Publishers are less important he thinks
- Serious game development is a growing field
- What may be preventing companies for coming is that they may not know how to approach internships
- One option is incubator companies.
 - Used for small start-ups like indies
 - Could use someone to help out
- Overall, there's a catch-22: 5-year work experience, but no way to start and accumulate without indie experience.

Britt Snyder

- WPI offers top-notch education for IMGD: IMGD was part of program for 10 years
- School has been here for 150
- School support is not universal
 - Within the culture; people believe IMGD is not a "valid" major
 - WPI IMGD publicized enough
 - Not enough support outside IMGD for career fair
- Studios have enough applicants when they have jobs so they don't need to come

- Survey graduates, utilize them and their info to get more people
- Companies won't hunt for artists
- Core Issue: Applicants go to game companies
- Companies come to career fairs to promote themselves, get good PR
- May be alternative ways to get into the game industry

Brian Moriarty

- Microsoft hires best the 3 IMGD students each year
- Subatomic Studios & Vicarious Visions are visiting in B term to host talks
- Cost is an issue for companies
- Small companies can't afford to come
- Big studios are far away
- One option is to graduate more star students
- Try to advertise WPI
- 390 IMGD schools, need WPI to stand out
- Send WPI students to big events for IMGD
- Could be an expensive proposition
- Find alternate routes to hand out resumes
- Increase WPI's profile with larger companies; let them know about us.
- Doing small career fair for IMGD could be an option
- BioMed does this
- Entertainment industry is based on contractor models
- Telepresence could help with spreading the word

New Option: During PAX, have a job fair event in Boston for PAX goers

Dave Ortendahl

- If companies are interested, have them talk to Dave
- Shorter is better, referrals are the best way to move forward
- Flood of experienced talent into tight market
- Caused by closings of larger studios
- Sustainable outreach is important
- Shelf life of games aren't as long
- "Just-in-time recruiting"
 - o Game companies don't follow a strict hiring schedule
 - More value in small networking events
- Regional economy plays small part
- Might require a second outlet like biomed
- Got Vicarious Visions to come to WPI for event
 - Tried to bring to career fair
 - Did not come due to worry of lack of interest
- Check where WPI students have gone
- CDC site -> Hire WPI -> Starting salaries and internship data
- IMGD art has "bear of a time"
- They work by contract, not position
- IMGD students "tunnel" on game development aspects
- Let them know about other options

Ben Taylor

- Tip Number 1: Never hire someone who hasn't made games
- Technical artists, rigging but can be multiple things
- Tend to hire people with more technical skill, familiarity with recent tech/software
- Having a product definitely helps
- "You only need a nugget" -references world of goo came from a simple project
- Make the toy, then make the game
- Highlight technical skills Portfolio of toys
- Some colleges have relations with Hasbro
- Going to conferences, events like BPM to show portfolio helps a lot
- Connections and networking
- "How do you know this guy?" Find a way to sell yourself
- Reason for hiring out of school: Freshest knowledge, better skill than industry leaders
- Industry looks for new skills, companies stay fresh and updated

Gus Brewer

- GSN games sister company to game show network, owned by Sony and DirecTV
- Social casino apps, skill web games, Facebook games, mobile games, Bingo
 Bash
- New age phase of apps. GSN casino apps then web presence

- Majority of workers are full-time. 450 employees over all their offices, a couple freelancers.
- Internship programs. About 20 per time.
- Work with employee relation departments.
- Go to universities and does recruit from them.
- Make their own job postings, constantly collecting resumes, LinkedIn, contacting passive candidates
- Would consider coming to WPI for future. Connect Gus with CDC or vice versa
- Passive vs active candidates
 - Active candidates reach out to companies
 - Passive candidates: companies reach out to them
 - Passive candidates are a gamble

Jono Forbes

- There is between 2-6 people at Defective Studios
- They still do internships allows them to find new people talent
- Intern connections have come to them.
- Demos at schools; students they talk to tend to land internships
- Most internships they do are unpaid.
- They are open to coming to WPI.
- They haven't gone out to find these kind of opportunities
- Would definitely be interested in coming.
- Close enough contact with game studios

- Companies do bring on interns from time to time.
- Companies keep a low profile when hiring.
- Companies tend to hire through contacts
- Could use the Boston IGDA mailing list.
- Possible company we could contact is Fable Vision,
- Do work for Boston children's museum,
- Whole spectrum of projects, animation, sound, etc

Sarah Ditkoff

- Between 30-35 full time, 2 marketing interns, 2-3 animation interns, few freelancers
- Do a little bit of everything, media across all spectrums, e-books, 2d & 3d more
 2d, museum kiosks.
- Individual entity, client-based services. Nonprofits, museums, schools, research institutions.
- New talent is based on freelance. Set pool of artists, animators, developers that
 they draw from. Have a form on their website, personal recommendations
 valued, hosts open houses to get foot in. Primarily draw in from an existing pool
 or recommendations.
- Hiring depends on position. Entry-level is best for internships, collaborative
 atmosphere valued, someone is looking to grow, interest in their subject matter,
 personality valued due to small group.

- Two different internship programs. Majority of applicants come through their website. Marketing is the only outreach. Word of mouth
- Haven't explored career fair since there's no need to
- Project-based. Only reason why they would do massive hires, would only be justin-time recruiting.
- Sign up for email newsletter. Engaging with them online helps. Online presence helps, especially for media.

Ichiro Lambe

- Dejobaan is an indie company, creating games in conduction with other studios.
- Game studios are of varying sizes
- There is in between, just less studios.
- There's 12 people across 3 projects that are not core Dejobaan, they are from local studios. 6 people are actually core Dejobaan
- Interns do work at these companies
- They sent out fliers to WPI and selected from those
- Dejobaan look to hire when needed
- Currently need a web developer
- These companies find better results through networks
- Large companies do need people of all skillsets
- Reason why he doesn't come: He does not know what kind of talent is available.
- Consistently in contact with publishers on current events every quarter
- If they know what he's got, then they are extremely impressed

- Reaching out and giving high quality information
- Send a list of students and their achievements/work.
- Asks for 3D modelers, can look at a catalog and see what students have done,
 click a link and see their work.

Brief Interviews with companies at the Career Fair

Demandware:

- Looking for CS students, hires students with software knowledge, also based on what's open. No Mechanical Engineering
- Been coming to the career fair for 3 years now
- The good quality of students, students have a good understanding of the structure.

Raybeam:

- Look for students that can pick up new tech, programming knowledge easily.
- Been coming to career fair for 4 years
- At least one good quality candidate each year from WPI.
- Look for students that don't get hindered by basics.

Cimpress/Vistaprint

Looking for Software Engineers, students that understand object-oriented,
 algorithm work, collaborative and team oriented

- Been coming for 10 years.
- High quality of students, tends to hire a lot of WPI students.

Kiva Systems:

- Students with robotics knowledge and software engineering knowledge
- Been coming for 3 years
- Students are a good fit, have hybrid knowledge, good quality