On April 27th, the class of 2008 bid farewell to DigiPen at this year’s Commencement Ceremony. Held at the beautiful Meydenbauer Center in Bellevue, WA, this year’s ceremony graduated students from five different degree programs: the B.F.A., A.A.A., C.E., M.S., and R.T.I.S. programs. This was the first class of students to graduate from the Bachelor of Fine Arts in Production Animation degree program. Family, friends, and guests watched as the graduates crossed the stage to receive their diplomas.

Graduates and guests listened intently as commencement speaker Kim Swift (class of 2005) shared her experiences both as a student and as a professional in the game industry. After earning her degree at DigiPen, Kim and her game team were hired by Valve to recreate their student game *Narbacular Drop* as a professional product. The result was *Portal*, which recently earned the title “Game of the Year” by the Game Developer’s Choice Awards. All find her speech to be an inspiring send-off as the graduates prepared to begin—or continue, for some—their careers in a variety of industries.

DigiPen wishes the very best for the class of 2008 and congratulates them on their fantastic accomplishments!

- Lindsay Heimer
DigiPen Professor Publishes New Book on Architectural Visualization

Art professor Adam Crespi has just published his first book, *Achieving Invisibility: The Art of Architectural Visualization in 3D Studio Max*. Artists can achieve invisibility in the world of architectural imagery by constructing images that are so real that viewers do not know they have been generated by a computer. This allows viewers to focus on the design. *Achieving Invisibility* provides working techniques into constructing photo-realistic architectural renderings and fly-through animations. It also discusses the reasons behind these techniques and explores the perceptions of the viewing public. In this book, Professor Crespi brings many of the improvements and techniques from the field of animation into architecture, which allows artists to add the final polish that many architectural renderings often lack.

Professor Crespi’s idea for the book came from his own teaching experience. “There is a dearth of material that covers the gamut of successful architectural visualization,” he states. “Available texts either focus on one piece of software or are so general that the user must translate any lessons into his or her software package.” Instead of designing *Achieving Invisibility* as a software manual, he has crafted a thorough collection of applied lessons. An important part of these lessons is the use of reference materials in constructing accurate models. His background in teaching, feature animation techniques, architectural design, and building and construction makes him the ideal person to write such a book.

The interdisciplinary approach makes *Achieving Invisibility* also stand out from other texts. It combines philosophy, psychology, and technical expertise in exploring the subject of architectural visualization. This approach provides a solid foundation of knowledge in architectural visualization for animation and game design students and professionals, including digital illustrators, designers, and background/environment artists. This text will be a useful addition to those preparing for these fields and for anyone interested in modeling or rendering buildings or environments.
Rendering is the process of calculating the final image or animation from a 3D program. The program calculates the geometry of the scene, the lighting on the objects, materials, animation, effects, the bouncing of light, and the casting of shadows and reflections from a camera view. After making these calculations, it outputs the result in one of many different formats. The rendered images are often taken into a compositing and post-processing program for further work, and then the animation is edited into its final form in a non-linear editor. The images shown here are some excellent examples of final renders from the B.F.A senior team projects from spring semester 2008.

“Peak” - Student film

“Crunch” - Student film

“Time for Harvest” - Student film
May’s PodClass was a roundtable for coders. Host Omaha Sternberg discussed the coding language of the future, with a special emphasis on which language current students should focus on for game development. This roundtable discussion covered several major platforms, including PC, mobile, and console. In June, the PodClass will focus on long-term gamer communities. The game industry has been in existence now for over twenty years. However, only in the past five years have we seen the power of the communities they have created. June’s PodClass will examine the formation of these communities, compare online and physical gamer communities, and discuss what happens when these communities get disturbed.

Listeners can subscribe to the podcast via iTunes or go to DigiPen’s website. If you have a topic you would like to hear about on the podcast, please email your suggestions to podclass@digipen.edu.

Important Dates

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>May 26</td>
<td>Memorial Day – no classes</td>
</tr>
<tr>
<td>June 20</td>
<td>Tuition balance for Fall Semester due</td>
</tr>
<tr>
<td>July 4</td>
<td>Independence Day – no classes</td>
</tr>
<tr>
<td>July 21-25</td>
<td>Summer Session final exams</td>
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<tr>
<td>July 25</td>
<td>Summer Session ends</td>
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<tr>
<td>Aug. 25-29</td>
<td>Orientation – First-Year Students</td>
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<tr>
<td>Sept. 1</td>
<td>Labor Day – no classes</td>
</tr>
<tr>
<td>Sept. 2</td>
<td>Classes begin – Fall Semester</td>
</tr>
<tr>
<td>Sept. 8</td>
<td>Last day to add classes for Fall Semester; Withdrawal deadline for 90% refund</td>
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<tr>
<td>Sept. 12</td>
<td>Automatic withdrawal date from classes missing prerequisites; Final day to drop classes without academic penalty</td>
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<tr>
<td>Sept. 20</td>
<td>Tuition deposit for Spring Semester due</td>
</tr>
<tr>
<td>Sept. 28</td>
<td>Withdrawal deadline for 75% refund</td>
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Summer Campus Hours

Please note the following building hours for Summer Semester, effective May 14 – July 25:

<table>
<thead>
<tr>
<th>Day</th>
<th>Main Campus</th>
<th>Art Campus</th>
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<tbody>
<tr>
<td>Monday-Friday</td>
<td>7:30 A.M. to 10:00 P.M.</td>
<td>8:00 A.M. to 10:00 P.M.</td>
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<tr>
<td>Saturday</td>
<td>10:00 A.M. to 6:00 P.M.</td>
<td>10:00 A.M. to 6:00 P.M.</td>
</tr>
<tr>
<td>Sunday</td>
<td>Closed</td>
<td>Closed</td>
</tr>
</tbody>
</table>
Another class of outstanding DigiPen students has graduated. As they head into the real world, we asked several graduates a few questions about their experiences at the Institute and what they will be doing afterwards.

Chris Allen
A.A.A. in 3D Computer Animation

After postponing the completion of his degree, Chris returned to DigiPen this academic year to finish the final courses needed for his A.A.A. He cherishes the immense personal growth that he has attained during his DigiPen experience. “I had to sacrifice a lot,” he says, “and what I got in return was more than just a degree – it was learning about what it takes to succeed as a working professional.” Over the last year-and-a-half, he has leveraged this experience as a Boeing employee. Now that he has completed his DigiPen degree, he is headed off to Boston. A recruiter interviewed him after spotting his resume on Monster. He looks forward to being able to do work about which he is passionate. “It’s no way to go through life just ‘getting by’ or working just to earn a paycheck,” he has learned. “The fruits of our labor should be meaningful and have value beyond monetary gain.” His DigiPen degree in 3D Computer Animation will allow him to pursue this type of rewarding career.

Matt Hansen
B.S. in Computer Engineering

While at DigiPen, Matt appreciated the hands-on approach to teaching computer science. From learning how to program their first semester to being assigned projects that always required coding – even in courses that were not programming classes – he and his C.E. peers became strong and proficient programmers by the time they graduated. “Other universities might have more open-ended projects where the solutions are more theoretical,” he says. “Instead, we definitely focused on implementation and practical solutions, and that personally worked better for me.” After graduation, he moved back to his home state of Minnesota where he hopes to start a career in full-cycle embedded development in the medical-device industry. His state has several large medical companies for which Matt would love to work. He believes that “It’s just a matter of finding the right job for me.” With his strong programming background, he should soon find his ideal position.

Michael Lee
M.S. in Computer Science

After earning a B.S. in Software Engineering from University of Calgary, Michael came to DigiPen in order to break into the game industry. “Prior to DigiPen, I had zero experience in game development,” he admits. Michael enjoyed learning how to make video games and is especially proud of the work his team did on developing and creating HollowPoint. He also appreciated the insightful and realistic feedback he and his fellow students received after presenting their projects.

After an initial – and humbling – interview with Microsoft’s Xbox division, he found the job search to be a seamless affair. This interview taught him the importance of doing his “homework” before sitting down to meet with interviewers. The great boost came during Career Day, when he had a thirty-minute screen interview with ArenaNet, the makers of Guild Wars. He believes that having the fully functional and playable version of his team’s game HollowPoint ready for Career Day made a positive difference. He subsequently received a full interview and an eventual job offer as a tools programmer. Although he has found work to be very different than school, he has enjoyed his time at ArenaNet so far.

“The people, environment, and company are terrific,” he says. “I’ve been learning a lot since I started,” he says. He especially appreciates being able to concentrate on one project without getting sidetracked by other assignments.

Crystal Quimby
B.F.A. in Production Animation

While at DigiPen, Crystal greatly enjoyed working with a great number of creative and like-minded people. “I fed off ideas and energy from my classmates and instructors,” she recalls. Her highlight was the senior project that she and a team produced, an animated short, T.D.A. 17. Crystal’s job hunt was “minimal” since a friend mentioned her to someone who then interviewed her and offered her a job. The day after graduation, she began working as a modeling and texture artist for Innovative Building Solutions in Bellevue. “I think in the future that I would like to move on to games and film, but for now this is a good starting point for me,” she says.

Rachel Weil
B.S. in R.T.I.S.

Like Crystal, Rachel also enjoyed being around many similarly minded people. She identifies her peers as the highlight of her DigiPen experience. “There are so many creative and brilliant people in the school,” she says, “and it gave me a good feeling about where the industry could be going once these people get out into it.” She also found that the job hunt proceeded rapidly. Soon after Career Day and the GDC, she had interviews scheduled. She only attended two interviews before being offered a job as a game developer with Big Fish Games located in Seattle. Rachel works on developing casual games at Big Fish.

Advice from the Graduates

With their years of experience and hard-earned wisdom, these graduates are in a unique position to offer some advice to DigiPen students still working on their degrees.

1. Build effective time management skills and work hard.
Successful DigiPen students develop their time management skills early in their career at the Institute. Many of the graduates believe that developing effective time management skills is even more important than building skills in art or programming. “Sometimes sacrifices are going to have to be made,” Crystal said, “but the reward will be great in the end.”

2. Develop good relationships with students, staff, and faculty.
With the numerous projects that all DigiPen students do, it is important to be a reliable and consistent teammate. “This involves acting like an adult, not a high school student,” Chris recommended. “You should take your work seriously, like a professional would.” This helps to build effective relationships with your peers. Other graduates noted that having good relationships with the staff and faculty greatly help when you need letters of recommendation, assistance with drafting resumes, and interview tips. “Our professors know what they are talking about when it comes to the job market,” Rachel learned. On a separate issue, Matt noted that if you communicate well with the faculty, you can speak up when you have an idea for doing something differently. “Student opinions are taken in high regard,” he said.

3. Prepare for the job market.
Several graduates recommended that students should start their job hunt early and should plan to take some time off from their work so that they can do a thorough search and prepare for interviews. Michael specifically found the book Programming Interviews Exposed: Secrets to Landing Your Next Job to be helpful. “It really does help to ease people into what to expect in a programming interview and what interviewers are looking for in answers,” he said. Both he and Rachel also spoke at length about the importance of having your senior project – whether it be a game or animated short – done by the time Career Day comes around. “A complete game looks a lot better and is more likely to impress,” Rachel pointed out. “Also, after Career Day, you will be so busy with interviews and the job hunt that you will have very little time to work on your game,” she said.

4. Be passionate about and enjoy what you do.
A number of the graduates mentioned how lucky they felt to be doing what they do. “Laugh a lot, and don’t take yourself too seriously,” Chris said. “It does wonders when you are stressing out.”
The research journal *Advances in Fuzzy Sets and Systems* has recently accepted an article written by Professor Michael Aristidou and two of his students, Erik Osaben and Alex Yopp. Professor Aristidou and these students have been working on this project for more than a year, and acceptance to this peer-reviewed journal indicates the high quality of their research.

Titled “Fuzzy Ordering of Fuzzy Numbers,” their paper explores the concept of comparing fuzzy numbers, which allows us to better understand the relationships among them. The traditional method of simply defuzzifying two fuzzy numbers and comparing them causes a loss of some information and results in an incomplete comparison. The three authors first examined two crisp methods, the Centroid Method and the Detyniecki and Yager’s Alpha-Weighted Valuations, to demonstrate what useful information is potentially lost through these processes. Then they explored how applying a fuzzy layer “built on top” of crisp ordering allows mathematicians to define how much two fuzzy numbers overlap. In the article, they demonstrate how this allows them to preserve information about the similarity of two fuzzy numbers and how far apart they are from each other, regardless of their shape. They finished the article by comparing the meanings of fuzzy numbers ordered crisply or fuzzily. This article makes some useful observations about fuzzy numbers, and the results point to future research in this direction. Professor Aristidou is continuing to work with these two students on a smaller follow-up paper that explores whether certain properties that real numbers have, with their natural ordering, have analogs in fuzzy numbers with their fuzzy ordering. Along with several others papers authored by DigiPen scholars, this work demonstrates the important, cutting-edge research done at the Institute.

In early May, a group of girls from Ballard and West Seattle high schools came to DigiPen. The Seattle-based organization Inspiring Girls Now In Technology Evolution (IGNITE) sponsored the field trip to the Institute. This volunteer organization encourages high school girls to consider careers in the high-tech industry and provides information about scholarships, internships, and community resources related to the fields of engineering and technology. DigiPen’s Outreach Coordinators Diann Strom and Heidi Munoz organized the inspirational and educational day. Melvin Gonsalvez, Senior Vice President of Production, began their tour with an engaging session about the industry and how DigiPen prepares its students for it. He was followed by a faculty/professional panel, which included DigiPen professors Geraldine Kovats (Art Faculty) and Brandii Grace (Game Software Design and Production Faculty) and Tina Chen, a Test Lead at Microsoft. During lunch, several DigiPen students — including Brittany Aubert, Jami Lukins, Victoria Smith, Cassie Boykin, and Chris Clark — mesmerized the group with passionate stories about their experiences at the Institute and the projects they have done. Many of the participants enjoyed hearing about what they have accomplished so far, and they found their experiences inspiring. The girls finished by touring the campus and seeing some student projects. Overall, the day was a complete success. Many of the IGNITE participants are eager to begin their own paths towards a job in the industry. DigiPen looks forward to continuing to partner with local organizations to inspire students in this way.

**IGNITE Brings Local High School Girls to DigiPen**