Department of
COMPUTER GRAPHICS TECHNOLOGY NEWS

WORDS FROM DR. HARTMAN

Hello everyone,

I want to thank you all for the positive comments and emails I have received regarding the CGT newsletter. We have been able to connect with recent graduates, as well as those who have been out of school for a while, and your messages have been fantastic. Keep 'em coming! This month's issue continues our look at current CGT students and faculty work, as well as beginning a look at some of the new facilities and research labs we have in the department. We also have another story about one of our alumni. I have had a few people ask me about how they can reconnect with our department, and I have suggested a few ways – student mentoring, working with senior capstone projects, hiring our students as interns, or advising us on curriculum – to name a few. We have even started something new called Afternoons with Alumni, where we have alumni present to our students, either online or in person, with some Q&A to follow. If any of those things sound interesting to you, please drop me a line and let me know.

My very best always,

Nate

SARAH GEORGE, PROFESSOR

Sarah George is an associate professor of practice for the Department of Computer Graphics Technology at Purdue Polytechnic in Richmond, Ind. She has more than 15 years of industry experience in architectural design and computer graphics technology, which she uses in every part of her job. Along with teaching four classes each semester, George helps oversee curriculum and creates community engagement projects to implement in her lessons as an important element of her classes.

The community engagement aspect of her teaching is important to George; she has seen how these projects can affect the future of students. Her efforts to bring projects to her classroom pay off in how well her students learn to market themselves, gain connections and be part of a dynamic workforce – all before graduation.

George's passion for building a truly dynamic workforce shows in her research into mindfulness as an effective teaching tool.

"I believe that using mindfulness as a philosophy in teaching is how professors can most effectively help students today, specifically iGen and Generation Z," said George.

George researches how these generations deal with stress differently, and how mindfulness incorporated into teaching can help bring students' visions and problem-solving abilities to life.

Her research in stress and stress management, called The Well Space Project, has led her to consulting with industries and schools across the Midwest and south-central states. George helps clients and teachers understand how the mind and body interact with technology. The Well Space Project teaches the importance of space design in both interior and exterior environments. The Well Space Project covers topics such as seating, organization and biophilia, as well as color, texture, lighting and available resources.

George explained that The Well Space Project "advocates for the idea of having physical spaces like these available for students to take tech breaks, mind breaks, decompress, refresh and get centered." Her goal is to create a widely accepted space design philosophy with healing in mind, which can help students and other users excel. George is excited for this project to gain momentum among educators, especially because it is so applicable to the technology fields in which she works.

George is currently reading Brene Brown's "Dare to Lead." Aside from her teaching and research, George co-teaches a multi-country study abroad program in physical and virtual architecture.

DANIEL TRIPLETT, PROFESSOR

Daniel Triplett is an assistant professor of practice at Purdue University in the Department of Computer Graphics Technology. He holds a master's degree in fine arts from Savannah College of Art and Design, and a bachelor's degree in fine arts from the Illinois institute of Art. He has more than 15 years of industry experience, which include his previous work as a game developer with companies such as Pixar, Marvel Studios and Nickelodeon. He continues to work as a freelance illustrator and photographer alongside his teaching.

Triplett teaches courses pertaining to geometric modeling, compositing, 2D design, 3D sculpting, and material and lighting art.

"My job is to pursue being an industry professional, while mentoring others to become industry professionals," explained Triplett. "I want to be able to relay complex information in a way that is powerful to students."

Triplett was a key person in the start-up of one of the department's newest labs. The Animation and Gaming Lab started as a digital/analog lab in which students could see practical models in real life, then use high-end computers to replicate what they observed. The multi-room lab makes both theory and digital application available to students, allowing them to learn about entertainment graphics in an applicable setting.

The ideas for this unique lab started coming together at the beginning of 2018; within a year, the lab was planned, built and in use. Triplett envisioned the concept, created a 3D visualization of the space, and oversaw decisions on the technology that would be installed, including 30 computer graphic work stations.

His newest project involves working on refiguring his introductory lessons in geometric modeling to be of world-class quality in the game and animation industry.

"This project is about taking my experience in modeling and refining my lessons in a way that would teach students the basics, while giving them upward mobility toward learning expert-level modeling."

Triplett feels passionately that students must give all their efforts toward learning in these four years at Purdue. This delayed gratification mindset is what has helped him accomplish some of his dreams, and what motivates him to help others. In the future, he wants to write and publish children's books, while continuing to make Purdue one of the top gaming and animation schools in the country.

FUSION ALLIANCE

Fusion Alliance, based in Indianapolis, Ind., is an enterprise solution provider that delivers engaging customer experiences and human-driven technologies. Fusion's expertise in digital, data, cloud and technology shapes clients' businesses with measurable results. They employ more than 500 consultants as strategists, designers, technologists and business experts.

With three graduates from the Purdue Technical Graphics (TG) and Department of Computer Graphics Technology (CGT), the CGT program is well represented at Fusion Alliance. Rebecca (VanDenburgh) Bretzinger (BS '93, TG), Doug Scamahorn (BS '98, TG) and Nick Wilcox (BS '00, CGT) all credit the excellent foundation their degrees gave them on which to build their careers and to succeed at Fusion Alliance.

Scamahorn, a solution director who has been with Fusion since 2004, says his Purdue degree taught him how to learn new concepts – a valuable skill in today's ever-changing digital economy. His professors helped him to understand and apply the coursework to create his own distinct portfolio as he started his professional career.

Wilcox is a competency manager who has been part of the Fusion team since 2011. He says, "CGT encouraged me to explore the wide range of emerging digital media production to develop two areas of interest: manufacturing design graphics and web/multimedia, the latter becoming the focus of my professional career."

Senior UX developer Bretzinger has been with Fusion since 2007 and appreciates the digital publishing and presentation skills she learned at Purdue – skills that provided a pathway into her early career in software training and, later, UX development.

Fusion Alliance wants to expand their internship program to offer Purdue CGT students real-world job experience. Fusion has both summer and school-year internships available, in which interns work on engaging project tasks, participate in strategic client meetings and grow their professional network.

To learn more, email internships@fusionalliance.com or visit info.fusionalliance.com/internships.

STUDENT ARTWORK FEATURES
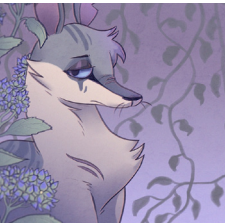
Taylor Christopherson is a sophomore from McKinney, Texas, studying animation and VFX. She created this digital piece in Adobe Photoshop, with the primary goal of portraying a specific mood.

"I focused on character design and color theory by giving exaggerated eyelids and tear drop markings. I also used purple to add to the gloomy and lonesome theme, but to also bring an air of mystery that there is still more in store for our character."

In the future, Christopherson would like to become a technical director for animated features.

Artistic inspiration for Erik Cederquist, a first-year student studying virtual product integration, came from a unique Instagram artist that caught his attention. In the image to the left, Cederquist used Adobe Illustrator and Pathfinder as he designed pieces of the work before importing them separately. Cederquist is interested in designing and creating computer-aided design models for companies.

Naomi Chandran is a junior in animation from Tucson, Arizona.

"For this piece, I was heavily inspired by the work produced by Studio Ghibli. I wanted to keep a vibrant color palette, but I also wanted there to be an evident story to the piece. I think what really made this piece work was the lighting. Before any lighting was added, the piece remained flat. I think what really brought this piece to life was adding little bits and pieces of sunlight here and there."

For the characters on the foreground, she drew them on a separate layer. Naomi used Adobe Photoshop coupled with layering techniques in order to achieve the realistic and painterly background.

NEWS AND NOTES

Women in Game Development Club share techniques with potential future Techies

Members of the Women in Game Development Club recently visited Cumberland Elementary School to introduce children to some of the concepts used in CGT classes. Club members used green screen techniques and Photoshop to make each child into their own character in a video game. Professor David Whittinghill, the club's faculty sponsor, helped start the club this semester as a resource for women game developers to share challenges that professionals have in the field, and to promote networking.

Professor adds Aras Innovator

Professor Travis Fuerst recently implemented Aras Innovator to manage all computer-aided design (CAD) assignments and grading in CGT 10301 - Geometric Modeling Applications. The implementation provides students with experience working with CAD in the context of a product lifecycle management system. The grade submission process mimics industry process for the release and revision of work. Fuerst also incorporated 3D PDF files for student to reference when working on modeling assignments.

STAY CONNECTED

 Purdue Computer Graphics Technology
 @cgt_purdue
 polytechnic.purdue.edu/cgt

CONTACT US

 765-494-7505
 cgtinfo@purdue.edu
 Knoy Hall of Technology
 Room 363
 401 N. Grant Street
 West Lafayette, IN 47907