Bedrich Benes, professor of computer graphics technology, teaches courses in geometric modeling, advanced topics in computing for graphics and introduction to programming for undergraduate students. He completed both his master’s degree and Ph.D. in computer science at the Czech Technical University in Prague. Upon his graduation in 1998, Benes became the first person in the Czech Republic to earn a doctorate in computer graphics. After teaching computer science and computer graphics in Mexico City for six years, he moved his work to Purdue, where he has worked as a professor and researcher since 2005.

Because the Department of Computer Graphics Technology (CGT) hosts a variety of specializations, Benes believes the department has a rare opportunity to bring talents together as a cohesive unit. The ability to tackle problems with different mindsets, such as artistic innovation through animation and bringing it to life by coding, is what makes CGT incredibly applicable. After witnessing graduates’ productivity and success, he loves that the unique skill sets and specific interests in CGT bring completely new possibilities to the table.

Benes focuses his research on geometric modeling and generative methods, such as procedural modeling, real-time rendering and high-performance computer graphics. He is director of the Purdue High-Performance Computer Graphics Laboratory, host to seven Ph.D. students and two master’s students. His main goals in the lab are to focus on cutting-edge research problems and to consistently produce highly skilled, quality graduates who are ready to take on the challenges of the industries in which they choose to work. Benes is currently a co-PI (principal investigator) on seven active grants.

Benes is the editor-in-chief of the Computer Graphics Forum Journal, one of the leading publications in the field. He has worked as a program committee member for dozens of conferences, including Siggraph. He also served as papers chair of...
Eurographics in 2017. In his free time, Benes enjoys photography, astronomy, traveling, running and reading. His recommended reading for students include “The Shallows” by Nicholas Carr, which discusses the dangers of technology on the human brain, and “Life 3.0” by Max Tegmark, a book about the dangers of artificial intelligence.

His best advice for a student in animation is to seize the opportunity you have to create projects and show your work. This opportunity for exposure and experience in the industry is something that Buchanan is passionate about, and his students achieve as he starts this new chapter of his life at Purdue.

MEGAN LEDFORD, UNDERGRADUATE

Megan Ledford has mastered the art of getting the most out of college, taking on each day with a positive attitude and love for what she does. A junior from Fishers, Ind., Ledford will graduate in May 2020 with a major in UX design, a minor in organizational leadership and communications and the entrepreneurship certificate.

At the start of her Purdue career in 2016, Ledford began classes as part of the first cohort of students of the Summer Start program before her commitment to Purdue, Ledford took notice of the kind of detail-oriented attention that Purdue gave her, and she was excited to work with people like that during her time here. Ledford decided to give back through the same program and accepted a position as a peer mentor. Currently, she edits content to advertise and promote the summer programs.

Being a student in the Department of Computer Graphics Technology has honed Ledford’s interests in graphic design and a minor in art and design. As a Lafayette, Ind., native, Irk grew up so close to the Purdue campus that she was able to attend an open studio showcase for both Purdue CGT and Art & Design graduate students. That is when she realized that her passion and ability for art and design could be a future career path. Since her days as an undergraduate student, Irk has grown her work and experience as a freelance graphic designer and user experience designer by accepting clients from both industry and nonprofit areas.

After graduation, Irk spent a year in AmeriCorps as part of the Immigrant and Refugee Services Program in Indianapolis. There, she learned about the types of barriers families face while trying to integrate into U.S. society. As her experience as an advocate and community program planner grew, it became clear to Irk that the skills she learned at Purdue could be applied to helping the people she had grown passionate about. This prompted her to work in collaboration with Esteban Garcia Bravo, assistant professor of computer graphics technology, to create a final project for a first-year web design class. This project gave her the opportunity to introduce students to the challenges that surround immigrants, while mentoring them through those problems.

As her year with AmeriCorps came to an end, Irk decided to take the project into her own hands by enrolling in a CGT graduate class. She wanted to use her passion for and knowledge of resettled refugee communities, combined with her background in design and technology, to address the issues she was first exposed to in AmeriCorps. In May 2018, Irk graduated with her master’s degree in human-centered design with a focus on co-designing across cultures to help address health-care challenges faced by resettled Myanmar refugees in Indianapolis.

Irk works for Purdue Polytechnic High School (PPHS) in Indianapolis. While following the design thinking process, PPHS students learn how science, technology, engineering, math (STEM) and humanities lessons apply directly to real-world, industry-level challenges. Irk is one of several design teachers who help students with projects. Upon graduation, PPHS students who meet admission requirements will be admitted to Purdue Polytechnic Institute, the Purdue college that’s home to CGT.

STAY CONNECTED
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UPCOMING EVENTS
Throughout the spring of 2019, Vetria Byrd and the Byrd Data Visualization Lab will conduct research through IN-MaC funding. This project, “Better Analysis of Indiana Department of Education Data for Improved Workforce Development”, will look for and visualize unexamined patterns in Indiana’s DoE data that might inform educational practices and allocation of resources at the state level and develop interactive ways for stakeholders to engage with the data to make informed financial decisions that impact workforce development.

The dates for the Senior Capstone Presentations are April 17th through 19th. All alumni are invited to campus to watch and evaluate the presentations.

Dr. Colin M. Gray will be presenting a talk entitled “Building Transdisciplinary Design Capability through an Integrated Studio Approach” at the Interaction Design (InDA) Education Summit in Seattle, Washington. In this talk, Dr. Gray describes the foundational elements of the world-class UX Design major at Purdue University.