Georgia Tech Research Institute | **STEM@GTRI**

STEM Programming
January – February 2021

Explorer's Guild Professional Learning Opportunities
More information can be found at gtri.gatech.edu/stem

Join us for this free series of professional learning opportunities centered around STEAM learning!

The Powerful Act of Prototyping

Having an idea in your mind is not enough to make it a reality. Designers use different methods of prototyping to help see their ideas come to life. Drawing the design in specific ways starts to help a designer see how parts might fit together. Paper prototyping helps decide shapes and scale, while also giving the opportunity to test certain aspects of the design. Digital prototyping allows us to put our designs in virtual worlds and start to interact with interfaces. Each of these methods can be used in the face-to-face, hybrid, or virtual classroom to help students think through ideas in project-based learning curriculum. Prototyping isn't about perfection. Artistic skills might help but the outcome of prototyping while designing is most often not as important as the knowledge gained from the process of making.

In this Explorers' Guild series, we will point you to methods of prototyping and resources that are easy to understand with a low threshold for entry. Let's get making!

Jan. 21, 4:30-5:15pm l Technical Drawing – From Ideation to Illustration   Register

Jan. 28, 4:30-5:15pm l Paper Prototyping – Time- and Cost Effective Prototyping   Register

Feb. 4, 4:30-5:15pm l Digital Prototyping – 3D Modeling and Virtual Prototyping   Register

Feb. 11, 4:30-5:15pm l Discussing Prototyping – Pulling It All Together   Register

Direct to Discovery Classroom Virtual Interactions
More info can be found at gtri.gatech.edu/d2d

Each free interaction is accompanied by GSE-aligned instructional resources designed to help you and your students get the most of these virtual experiences with STEM experts.

Jan. 26 10:00 – 10:45 am	**What is it like to be a Computer Research Scientist?** *There's More Than You Think! Computer Science Career Series* When we think of computer experts, we might think of programmers who create apps, software, and video games - but what about the computer experts creating the next generation of computer science technology? Learn about how computer scientists use their knowledge and skills to research and create new methods, technologies, and systems. We'll be joined by Eric Soto, GTRI Research Scientist, about his experience and career in creating new technology solutions.	Register
Jan. 27 – Mar. 3	**D2D Design Challenges – Engaging in authentic STEM – virtually!** Looking to engage your students in authentic STEM PBL despite the challenges of hybrid and virtual learning? Join us for this series of GSE-aligned design challenges!	Learn more and register
Jan. 28 10:00 – 10:45 am	**What happens when there's no toilets?** *D2D with Captain Barrington Irving* Join Capt. Irving and GTRI scientists Kevin Caravati, MBA and Ilan Stern, PhD to earn about how scientists and engineers are solving sanitation issues in places where conventional toilets just won't work. Aligned to 7th Science GSE.	Register
Feb. 10 11:00 – 11:45 am	**What's it like being the Director of Gaming and Esports Research?** *There's More Than You Think! Computer Science Career Series* Your students probably play video games, but did you know they are an official sport for many universities? What about the fact that people research video games and esports? Learn about what it takes to be a professional in the world of gaming from Laura Levy, Research Director for Gaming and Esports Applied Research (GEAR) at Georgia Tech.	Register

Feb. 11 **10:00 –** **10:45 am**	**What's happening on Georgia's coast?** *D2D with Captain Barrington Irving* This interaction will feature researchers from Savannah State University. We'll learn about Georgia's unique coast and barrier islands, and the forces that shaped (and are still shaping) them! Aligned to 6th Science GSE.	[Register](#)
Feb. 15 **1:00 –** **1:45 pm**	**What is it like to be the Chief Information Officer of a university?** *There's More Than You Think! Computer Science Career Series* Want to learn more about what it's like being an IT leader of a large organization? Join us as we learn from Georgia Tech's Chief Information Officer, Daren Hubbard, about what it's like being a CIO, and how he uses his previous experiences and education to solve problems in his current work.	[Register](#)
Feb. 25 **10:00** **-10:45 am**	**Is being a sloth the best way to study an ecosystem?** *D2D with Captain Barrington Irving* This interaction will feature Dr. Magnus Egerstedt of Georgia Tech. Human scientists are often loud, fast-moving, and very obvious to animals that would rather us not see them. Join this D2D to learn about a robot designed after one of the world's slowest animals and how it could be used to study ecosystems in ways humans can't! Aligned to 4th and 7th Science GSE.	[Register](#)