



June 2021 | Vol. 8



STEAM NEWSLETTER



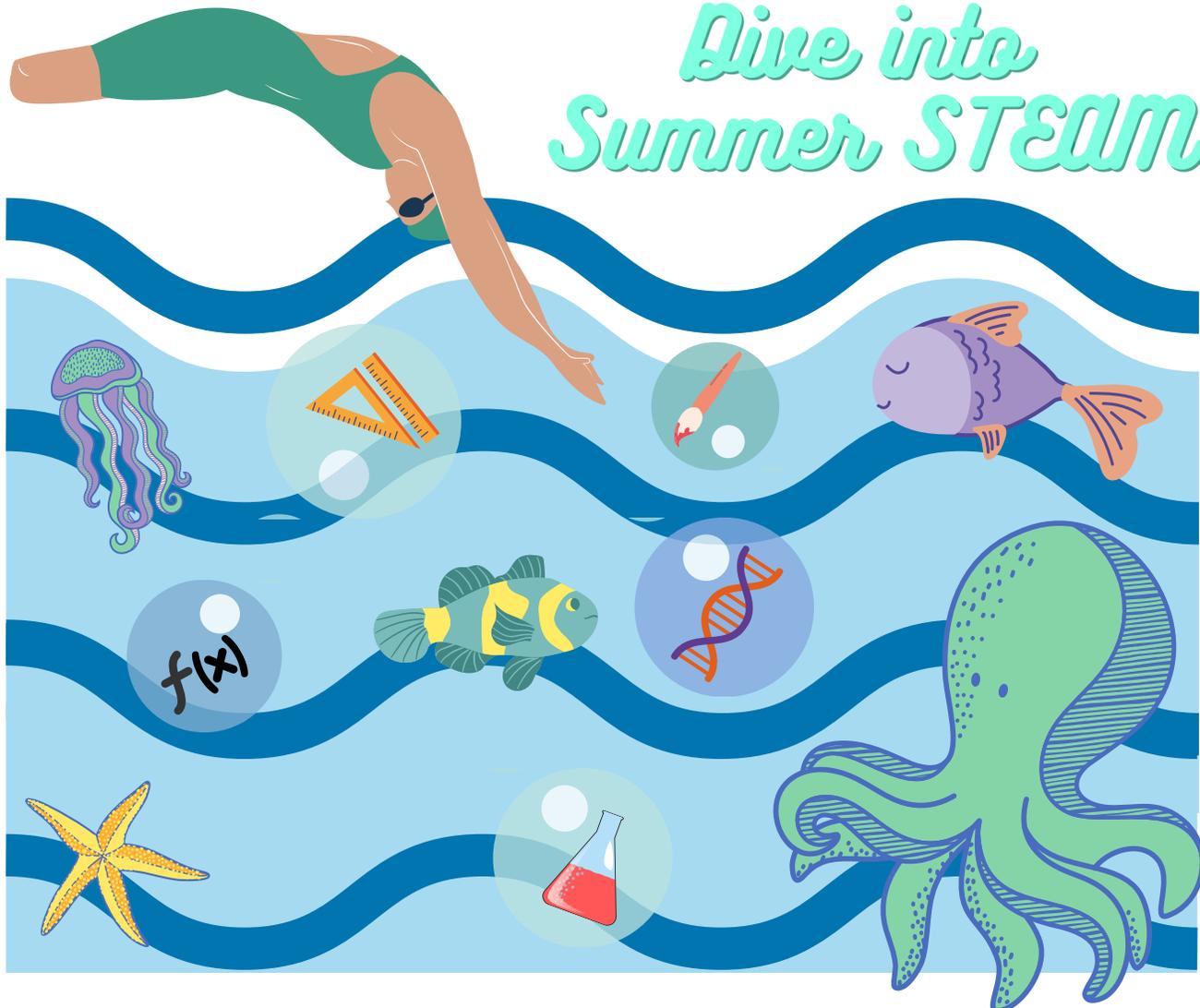
THE OFFICIAL NEWSLETTER FOR THE ILLINOIS DEPARTMENT OF
INNOVATION & TECHNOLOGY (DOIT) STEAM EDUCATION GROUP

$$2 + 5 = 7$$



BACK AT HEADQUARTERS

*Dive into
Summer STEAM*



Let off some STEAM with these fun activities!

K-4

- **[ANIMAL MIGRATION ACTIVITY GUIDE](#)**

5-8

- **[POLLINATOR BACKYARD ACTIVITY GUIDE](#)**

9-12

- **[DOWNLOAD NASA'S EARTH NOW APP](#)**
 - **[THIS APP SHOWS VISUAL REPRESENTATIONS OF CLIMATE DATA FROM EARTH SCIENCE SATELLITES.](#)**

Educator's Corner

STEAM resources for in-person, hybrid, + remote learning, and professional development

- **[STEM Learning Resources for Educators from the National Inventor's Hall of Fame](#)**
 - **[U.S. Dept. of Ed. 'You for Youth' STEM Initiatives](#)**
 - **[Science Journal for Kids and Teens: Science Lesson Plans for Teachers](#)**
 - **[LTC EdTechNext professional learning retreat in Galena, IL \(August 2-3, 2021\)](#)**
 - **[Illinois Earth Science Teacher Workshop: Developing Sustainability Storylines for Illinois' Earth Science Classrooms \(Applications due June 18th\)](#)**
-

2021 Tech Prairie STEAM Expo
at the Illinois State Fair,
Aug. 18-22

News & Events

This Expo will provide a forum to highlight K-12 and postsecondary education, business, industry, research, and development related to STEAM in Illinois with a goal of allowing the community space to engage, interact, and explore with exhibitors from across the state. The Expo will highlight the incredible innovation and emerging career



and educational opportunities in STEAM fields throughout the state during the great celebration that is the Illinois State Fair. We hope to see you there!

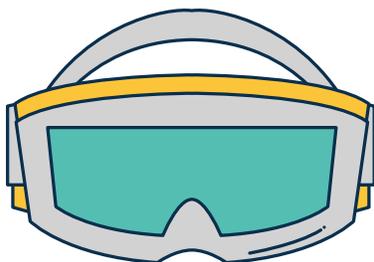
2021 Cyber Scholarship Finalist and Scholars

15 Illinois high school students were named National Cyber Scholars



"Illinois Department of Innovation & Technology (DoIT) congratulates the winning Illinois National Cyber Scholars who are among the best high school students nationwide completing a grueling 48-hour cyber competition, which challenged participants to solve computer security problems and/or capture and defend computer systems. Over 30,000 students across the country sought to qualify for the competition from The National Cyber Scholarship Foundation - and just 5,000 advanced. Our future cyber workforce looks strong - congrats to all!"

"VR Project Revives Razed Black Neighborhoods in Charlotte, N.C."



Article by *Government Technology*
"A Johnson C. Smith University project will give individuals a view into the destruction of historical Black neighborhoods of Charlotte, N.C., through virtual reality tech. The project is expected to be completed in 2022".



Pride Month & LGBTSTEM Day:
Resources from the American Institute of Physics

Did you know that June is LGBTQ+ Pride Month?

"AIP and its Member Societies are committed to promoting diversity and inclusion in the physical sciences. In honor of Pride Month and LGBTSTEM Day, we have gathered some resources that support the LGBTQ+ community of scientists. Also highlighted are contributions from the LGBTQ+ community to science and humanity that are worthy of celebration."

Illinois Digital Educator's Alliance (IDEA) Summer Learning Webinar Series

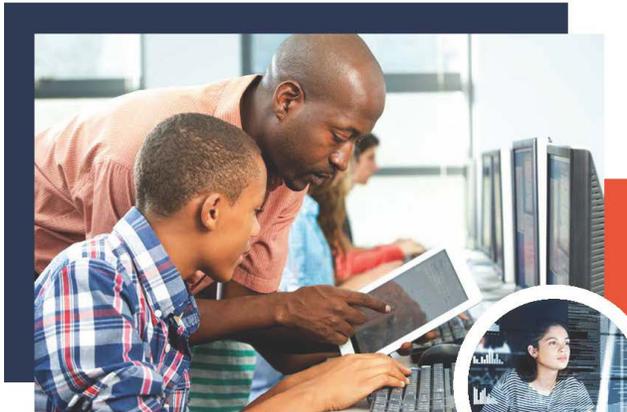
"Join IDEA every Tuesday in June as we learn and collaborate with members from Michigan Association for Computer Users in Learning (MACUL), Nebraska Educational Technology Association (NETA), and Texas Computer Education Association (TCEA)."



Topics include:

- June 1: SEL in Action
- June 8: Let's Make Equity a Verb
- June 15: How Esports Can be Used to Further Educational Opportunities for Learners
- June 22: Empower a Culture of Innovation in Your School Library
- June 29: Computer Science Roundtable

Illinois educators can earn one (1) PDH for live attendance of each session.



The Teaching Endorsement in Computer Science is a five-semester pathway that meets the Illinois State Board of Education's credit requirement for obtaining a teaching endorsement in computer science.

Offered by the University of Illinois Urbana Champaign (UIUC) in collaboration with the Discovery Partners Institute (DPI) and other regional partners, this cohort-based endorsement program was designed for practicing teachers in grades 5-12 with a desire to build skills in teaching computer science.

CSTed is presented in cooperation with our implementation partner:



The first cohort begins in Summer 2021: 14 June to 7 Aug

with an introductory Computer Programming and the CS Classroom course.

TEACHING ENDORSEMENT IN COMPUTER SCIENCE (CSTed)

"Want to teach Computer Science? Led by UIUC's College of Education in collaboration with the Discovery Partners Institute, the Teaching Endorsement in Computer Science (CSTed) is a new endorsement program in CS for any current teacher in grades 5-12. It is a 5-semester program of study with the goal to increase the number and quality of CS teachers in Illinois, particularly in schools and communities that have had limited or no CS courses. The first cohort begins this Summer with an introductory course on Computer Programming and the CS Classroom. Registration opens April 26th. Tuition support is available on a first-come, first-served

basis."

[Program Flyer](#)

Summer Computer Science Professional Learning

LEARNING
TECHNOLOGY
CENTER of ILLINOIS

"With the recent enactment of **Public Act 101-0654**, Illinois schools will need to provide developmentally appropriate opportunities for students to learn computer literacy skills and intensive instruction in computer literacy as a graduation requirement starting 2022-23 SY. **Code.org**, a national non-profit dedicated to increasing CS opportunities, provides free curricular resources and lessons for all grade levels. To help new and experienced computer science educators implement the curriculum, Code.org partners with the **Learning Technology Center** to offer professional learning events. Participants learn how to teach computer science and use the available curriculum. A limited number of scholarships are available for this program."

- **CS Fundamentals (Grades K-5)**
 - June 24 (Online)
- **CS Discoveries (Grades 6-8)**
 - July 12-16 in Springfield (Capital Area Career Center)
 - July 19-23 in Chicagoland (Location TBD)
- **CS Principles (Grades 9-12)**
 - July 26-30 in Springfield (Capital Area Career Center)
 - August 2-6 in Chicagoland (Location TBD)

STEAM SUMMER CAMPS

Summer is quickly approaching! Many organizations have STEAM-centric K-12 summer camps still open for registration with in-person, virtual, or hybrid models. Check out a few here or get inspired to research your area's opportunities.



Illinois Maker Lab Online Summer Camps 2021

Camps offered:

- Adventures in 3D Modeling and Design with TinkerCad
- Adventures in 3D Modeling and Design with Fusion 360 Online
- Minecraft + 3D Printing



4G STEM Camp | Girls + Games + Gadgets = Genius



4G STEM Camp 2021

GIRLS+GAMES+GADGETS=GENIUS | JUNE 2021

go.illinois.edu/4GSTEMcamp



"4G STEM Camp introduces girls entering sixth, seventh, and eighth grade to careers in STEM (Science, Technology, Engineering, and Math). The camp includes hands-on activities, lab experiments, and field trips to area businesses offering STEM-related careers."

Illinois Park Districts + Esports

Do you know someone that enjoys Esports? Search your local parks district's website to see if they have a program!

Some examples around Illinois include:

- [Lombard Park District](#)
- [Town of Normal Parks & Rec](#)
- [Naperville Park District](#)
- [Grayslake Community Park District](#)



Girls Who Code at UIC Club

"Become a Girls Who Code Member at UIC!
Girls Who Code at UIC Club is a FREE year-round program for 9th-12th grade students in the Chicago-land area who are interested in exploring computer science.

We're building the world's largest pipeline of future female engineers and this year WE'RE GOING VIRTUAL! Everyone, regardless of gender, is welcome to be part of Girls Who Code."

Date for the [2021-22 Program](#) coming soon.

Skokie Park District STEM Summer Camps

"For decades, the Skokie Park District has provided summer camps that focus on adventure, friendship, fun, exploration, discovery, and safety. Every summer, the district's camp program promises to offer yet another exciting experience for the children of Skokie!"

Partial list of camps includes:

- Kids' STEM Studio Camps – Mechanical Engineering
- Kids' STEM Studio Camps – Coding & Games-RPG Games
- Kids' STEM Studio Camps – Electrical Engineering
- Kids' STEM Studio Camps – Coding & Arcade Game Design
- Play Well Adventures In Stem
- Play Well Jedi Master Engineering
- Play Well Minecraft Engineering
- Play Well Pokémon Engineering
- Play Well Stem Explorations
- Play Well Transportation Engineering
- Play Well Transportation Master Engineering

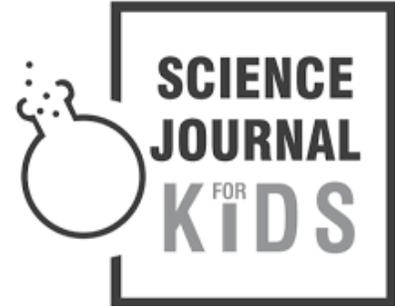


STEAM Resource Spotlight

Science Journal for Kids and Teens

Hundreds of scientific articles. Written for kids. Approved by scientists.

"Most scientific research is conducted and reported in specialized scientific journals in a language accessible only to adult scientists. Kids have the right to understand the world they are inheriting from us. That's why Tanya Dimitrova, while working as a high school science teacher in Texas, founded the nonprofit organization which publishes Science Journal for Kids."



Girls Who Game

"Girls Who Game (GWG) is an extra-curricular program that provides an opportunity for young girls and underserved students across North America to learn more about gaming and the use of Minecraft as a learning tool, while developing their global competencies, such as communication, collaboration, critical thinking, and creativity."



howtosmile

"Search almost 3,500 of the very best STEM activities on the web. Find handpicked activities from your favorite science museums, public television stations, universities, and other educational organizations. All activities are available to anyone, free of charge. Start searching now and filter by age, material costs, and learning time to find exactly what you need for your educational program, class, or family."



The 'A' in STEAM

"Arts foster scientific success" -Dr. Temple Grandin

This series is dedicated to showing how art and creativity play a crucial role in our society on its own and even within the STEM fields . There's a great deal of artistry that goes into our favorite products and media we consume that make our lives easier, or at least a bit more enjoyable, and teaches us valuable lessons about history.

Arts Summer Camps

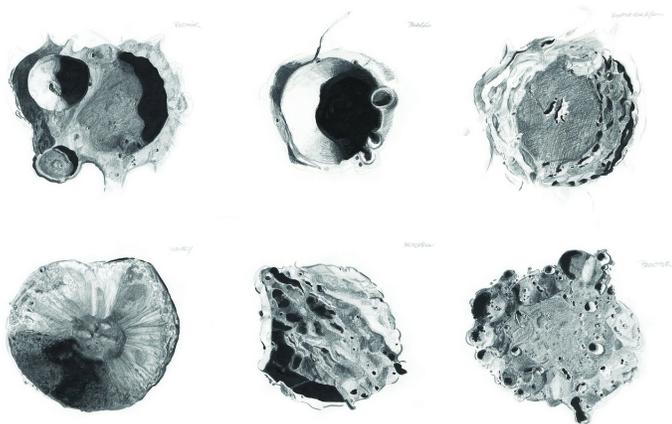
Find your creativity this summer with plenty of Arts camps around Illinois! Search your own community for summer camp options or get inspired from this short list:

- UIUC College of Fine + Applied Arts Summer Programs
- NIU College of Visual and Performing Arts: Summer in the Arts
- ART Inc. Peoria Summer Arts Camp
- School of the Art Institute of Chicago Online Summer Camps

In the news...

The New York Times: An Artist Sketches the Giant Gender Gap on the Moon

"By drawing the small number of lunar craters named for women, an artist hopes to highlight women's contributions to the sciences."





www.illinois.gov/doiit-steam



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