

BACK AT HOMEBASE



Let off some STEAM with these fun activities!

K-4

PBS | 4th of July SLIME

5 - 8

Instructables | Rubber Band Harmonica

9 -12

NASA | Access Mars in VR

Educator's Corner

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

- Google | Stem Resources for Educators
- freeCodeCamp
- CS4IL | Digital Resources for K-12 Computer Science Education
- Department of Energy | Stem Rising Resources
- MIT | OpenCourseware Resources
- National Science Foundation | Stem Resources
- Microsoft | Hacking STEM
- Science Journal for Kids & Teens | Lesson Ideas
- AIArtists | Generative Art created by AI

NEWS & EVENTS

2022 Tech Prairie STEAM Expo at the Illinois State Fair, Aug 17 - 21

The Illinois Department of Innovation and Technology (DoIT) is hosting its second annual Tech Prairie STEAM Expo at the Illinois State Fair.

Join us this year to experience interactive exhibits, eSports, drone racing, and more.

The STEAM Expo will be located at the **Orr Building**, next to Conservation World, on the **West side** of the Illinois State Fairgrounds.



TICS * SCIENCE

<u>Chicago expands and activates quantum network, taking steps toward a secure quantum internet</u>



Incorporating STEAM within the Classroom

The Learning Technology Center of Illinois is offering multiple workshops to educators to further improve their curriculum and adapt to the ever evolving field of education.

These workshops offer engaging activities and new learning opportunities to bring into the classroom and further professional goals.

LTC Jump Start at South Cook

Tue. July 19, 2022 | 8:30 AM - 3:30 PM Wed. July 20, 2022 | 8:30 AM - 3:30 PM

Location: 253 W Joe Orr Rd, Chicago Heights, Illinois 60411

Integrating Robotics Across the Curriculum

Thu. July 21, 2022 | 9:00 am – 2:30 pm Location: Illinois Valley Community College

Computer Literacy Standards

Wed. July 20, 2022 | 8:30 am

Location: 815 N Orlando Smith St,

Oglesby, IL 61920 - 2101

iculum LEARNING TECHNOLOGY CENTER of ILLINOIS

<u>Invented by UChicago scientists, a new kind of solar</u> <u>cell could spur useful technology</u>

"In a new study, University of Chicago scientists find that holes can also improve technology, including medical devices.

Published in Nature Materials, the

paper describes an entirely new way to make a solar cell: by etching holes in the top layer to make it porous."

STEAM Resource Spotlight



"When students are engaged in making, they embrace creativity, innovation, and discovery, and have meaningful opportunities to collaborate, solve problems, and imagine a vibrant future."



Every Child a Maker



IDEA Summer Programming

IDEA is hosting a plethora of professional learning opportunities this summer!

The Illinois Digital Educators Alliance's (IDEA) focus has been to support the integration of technology in education since 1986.

Since then, the non-profit organization has grown to 12,000 members, who are made up of teachers, technology coordinators, administrators, school support staff, and other Illinois stakeholders.

Science Journal for Kids & Teens



"Science Journal for Kids aims to make scientific research discoveries more accessible to the general audience and particularly to children...In addition, Science Journal for Kids prepares and offers teacher's aids and resources to enable integration of the scientific literature in a classroom curriculum."

Summer Camp Opportunities

Many organizations have STEAM-centric K-12 summer camps still open for registration with inperson, virtual, or hybrid models.

Check out a few here or get inspired to research opportunities in your area.



<u>Northern Illinois</u> <u>University</u> STEAM Camps

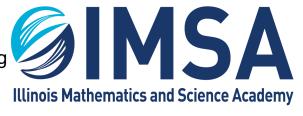
Governor's State University | Summer STEAM Camp 2022

"Governors State University's STEAM Camp has introduced campers ages 11 to 16 to current topics in science, the arts, career development and life on a dynamic and modern college campus."



Summer @ IMSA 2022

"The IMSA Student Enrichment Team is bringing a slate of amazing STEM-based summer camps to our communities in the Aurora, Metro East, Normal, and Springfield, IL areas!"





SIU | ESPORTS BOOOT CAMP 101

"This 5-day camp will load gamers into the world of competitive eSports, generating awareness of healthy gaming habits and exploring what it means to be a part of a successful team."

<u>Illinois State Museum | Time Travelers Summer Camp</u>



"Get ready to blow your wig, get groovy, and have a ball as we travel through time. Each day, campers will find themselves in a new decade. From the 1890s to the 1990s, they will explore fashion, music, technology, and culture through art and science activities."

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 teach us valuable lessons about history.

The Evolving Field of AI Generative Art

Pushing Boundaries with Generative Artmaking

Artificial intelligence has spread into the A in Arts.

Northwestern's McCormick School of Engineering has explored the idea of artificial intelligence (AI) in art and how it can be utilized.

"To shed light on perceptions of AI as a tool and collaborator in the artistic process, or perhaps even a competitor to human artists, the Northwestern University Center for Human-Computer Interaction + Design (HCI+D), a collaboration between Northwestern Engineering and the School of Communication, hosted a virtual panel on May 9 to discuss the implications of AI for artistic creation."

Northwestern ENGINEERING

McCORMICK SCHOOL OF

Northwestern | Coding Costumes

"Blending computer science and art comes naturally to Compton, assistant professor of instruction in computer science at the McCormick School of Engineering and a generative artist. Last fall, Compton met with costume designer and Associate Professor of Costume Design Ana Kuzmanic to discuss a possible collaboration between theatre design students in the theatre department and students in Compton's Generative Methods class, which started in winter quarter."



The eyebrows on one of Compton's coded masks are controlled by a MIDI slider.



www.illinois.gov/doit-steam



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Please submit STEAM ideas, comments, or questions using our contact us form.

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