



2024 STEM & Innovation Summit

OCTOBER 22

ARIZONA SCIENCE CENTER
8:30 a.m. to 5:00 p.m.

HOSTED BY



SCITECH
INSTITUTE



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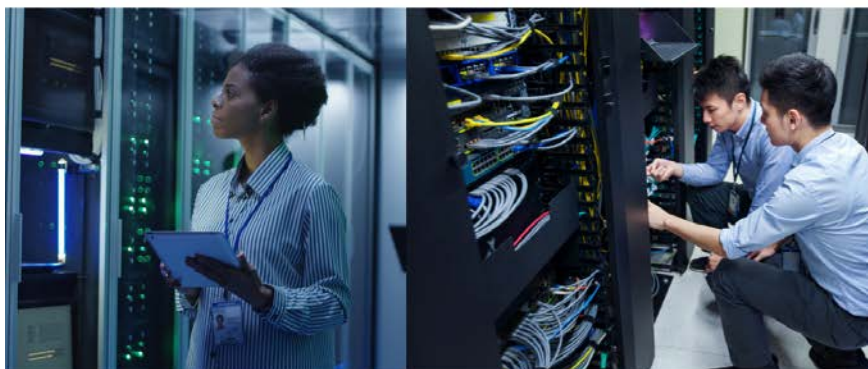
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HELP SHAPE THE FUTURE OF DIGITAL INFRASTRUCTURE & BUILD YOUR CAREER



The data center industry is booming, and Arizona is at the forefront! The Arizona Data Center Alliance and 7x24 Exchange are working to build a stronger workforce for the future of digital infrastructure. Whether you're an IT professional or looking to start a career, this is your chance to join a critical, fast-growing industry.

Explore career paths and connect with industry leaders today!



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ARIZONA SCIENCE CENTER

Located in downtown Phoenix, Arizona Science Center features more than 300 hands-on exhibits, a five-story giant-screen theater, live demonstrations, traveling exhibitions, and exciting science programs.

The Center offers programs for all ages, including Science on Wheels, CAMP INNOVATION, Teen programs, Professional Development, and Adults' Night Out: Science With A Twist. Whether onsite or at your location—get ready to embark on a hands-on STEM learning journey you'll never forget. To learn more or to reserve tickets, visit azscience.org or call 602-716-2000.



SCITECH INSTITUTE

SciTech Institute, a proud affiliate of the Arizona Technology Council, is a nonprofit organization dedicated to supporting and strengthening

science, technology, engineering, and mathematics (STEM) by enhancing and promoting STEM awareness and engagement in Arizona and beyond. Since 2002, we have made it our mission to work towards a prosperous and equitable world where STEM is within reach of everyone because STEM innovations in turn make the world a better place.

The Institute strives to connect the STEM community and inspire individuals to engage in STEM, as well as pursue STEM-related educational and career pathways. Our strong connections with civic and community organizations, business and industry leaders, and K-16 educational institutions allow the SciTech Institute to serve as a catalyst for building a world-class STEM workforce.

Our STEM Ecosystem and diverse programs include Chief Science Officers (CSOs), Little Free STEM Libraries, STEM Ecosystem, Arizona SciTech Festival, and Science for All.

To learn more about our programs, visit our website at scitechinstitute.org.





OPENING SESSION

FLINN THEATER | 9:00AM

SPECIAL WELCOME

Maiya Cheeks

STEM Ecosystem Program Manager, SciTech Institute

Claire Conway

STEM Ecosystem Director, SciTech Institute

Beth Nickel

Chief Learning Officer, Arizona Science Center

Video Introduction:

Arizona Science Center & SciTech Institute

KEYNOTE SPEAKERS:

Steven Zylstra

President & CEO, Arizona Technology Council & SciTech Institute

Guy Labine

The Hazel A. Hare President & CEO, Arizona Science Center

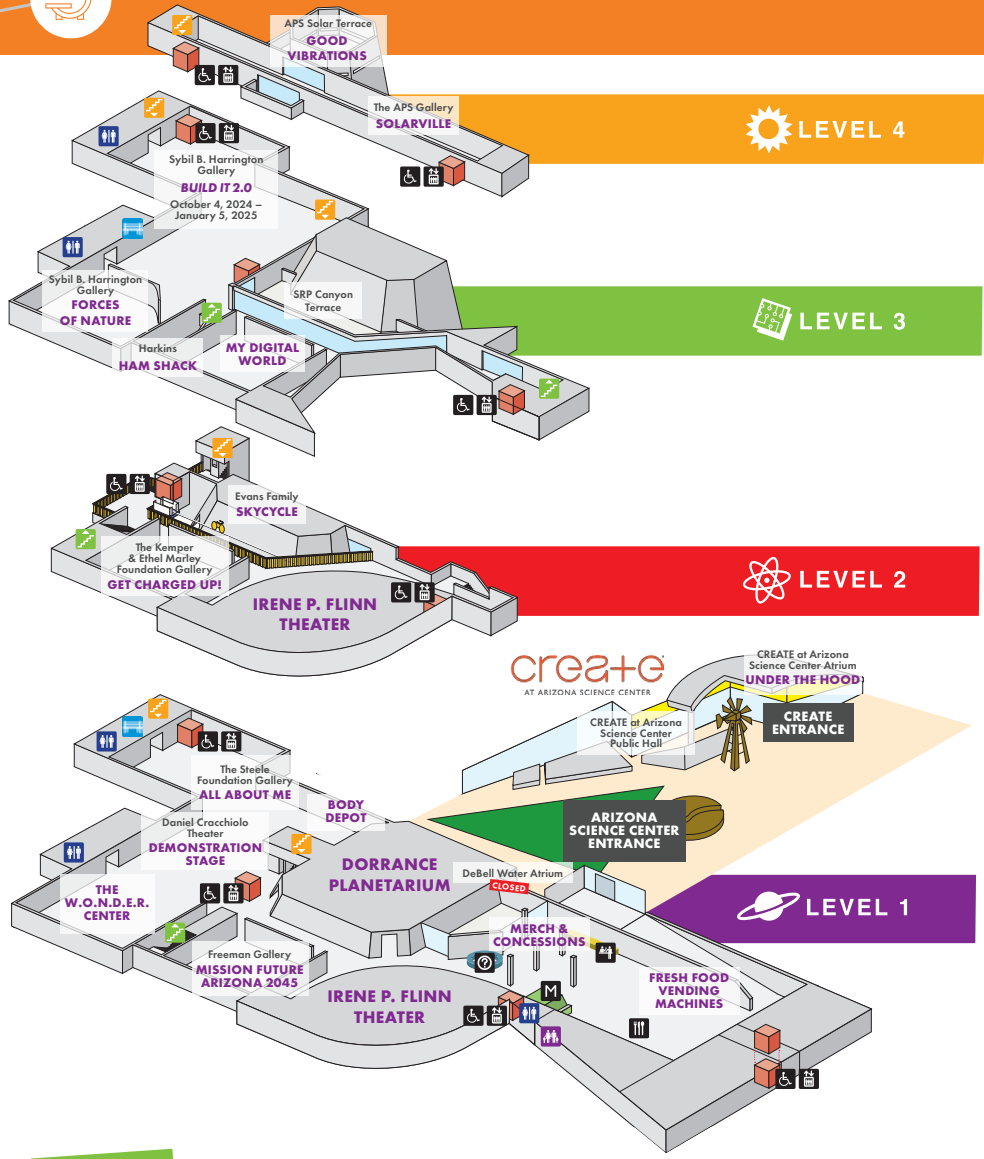
RJ Muller

Director, Public Affairs, Cox Communication





MAP



KEY

- MEMBER ZONE**
- TICKETING**
- DINING**
- INFORMATION**
- GOING DOWN STAIRS**
- GOING UP STAIRS**
- ELEVATORS**
- RESTROOMS**
- FAMILY RESTROOMS**
- ACCESSIBLE**
- TAKE A BREAK AREA**



STEM & INNOVATION SUMMIT

SESSION SCHEDULE

9:00 AM - 9:30 AM:

- Opening Session, **Irene P. Flinn Giant Screen Theater**

9:30 AM - 10:15 AM

- Broadband 101, **Irene P. Flinn Giant Screen Theater**
- Inspecting with Maricopa County, **Daniel Cracchiolo Theater (DCT Demo Stage)**
- Taking Science 2 The Max: Reimagining Science Through Digital Integration, **Downstairs Classroom**
- Edison Robots in the Classroom (Free Edison Robot Included), **Canyon Terrace**
- Innovations in Energy and Carbon, **CREATE Public Hall**
- Making Small Adjustments for Big Outcomes: Combining Computer Science and Math! , **CREATE Classroom**

10:30 AM - 11:15 AM

- Becoming leaders: STEM education mentorship, **Daniel Cracchiolo Theater (DCT Demo Stage)**
- Exploring Pathways to Bioscience & Healthcare Careers, **Body Depot**
- Empowering Students to Use AI for Scientific Inquiry: 5 Critical Thinking Skills for Middle and High School Classrooms, **Downstairs Classroom**
- Digital Equity Round Table Discussions, **Canyon Terrace**
- Bridging Classrooms and Chips Panel Discussion, **CREATE Public Hall**
- Authentic Research and Innovation Pathways (4-12), **CREATE The Zones**
- Increasing Representation in STEM starts in K-12 , **CREATE Classroom**



STEM & INNOVATION SUMMIT

SESSION SCHEDULE

11:30 AM - 12:45 PM

- Lunch, **Canyon Terrace** and **CREATE**

1:00 PM - 1:45 PM

- Flash talks: West Valley Chief Science Officers, Arizona Coalition for Career Readiness, My Future AZ/Pipeline AZ, and GenTech, **Irene P. Flinn Giant Screen Theater**
- The Impact of the Chief Science Officers Program, **Daniel Cracchiolo Theater (DCT Demo Stage)**
- Bridging Classrooms and Chips - A Teacher Workshop, **Downstairs Classroom**
- Diverse Jobs of Broadband Panel, **CREATE Public Hall**
- SWSIE Panelist Quiz and Community Feedback, **CREATE The Zones**
- Strategies to Meet the Needs of All Learners, **CREATE Classroom**

2:00 PM - 2:45 PM

- Building Resilient Communities in Phoenix: STEM Solutions from High School Innovators (BioScience HS), **Daniel Cracchiolo Theater (DCT Demo Stage)**
- Cord Blood, Cellular Therapies and Careers in the Classroom, **Body Depot**
- Empowering Communities Through Citizen Science to Improve Environmental & Human Health, **Downstairs Classroom**
- Makers Making Change Arizona Chapter, **CREATE The Zones**
- STEM in the Arts, **CREATE Classroom**



STEM & INNOVATION SUMMIT

SESSION SCHEDULE

3:00 PM - 3:45 PM

- Creating Opportunity: Evaluating Broadband Access in Arizona, **Irene P. Flinn Giant Screen Theater**
- Everyone Can Be a Scientist! Inspiring Future STEM Students and Careers! (Basha Science is fun), **Daniel Cracchiolo Theater (DCT Demo Stage)**
- Enhancing Irrigation Water Management with Smart Drones and Sensors for a Sustainable Future, **Body Depot**
- Beyond Skynet: Embracing AI as a Collaborative Tool, **Downstairs Classroom**
- How to Build STEM minded students through the Math Practices , **CREATE Public Hall**
- Building a Positive and Sustainable Space Future: Inspiring Participation with the ASU Interplanetary Initiative, **CREATE The Zones**
- A Peek Below: How Geologists Search for Mineral Resources, **CREATE Classroom**

4:00 PM - 4:45 PM

- Southwest Human Development Makers of Change Challenge - Student presentations, **Daniel Cracchiolo Theater (DCT Demo Stage)**
- Bioinformatics in the Classroom - Mining the Information in DNA & Proteins, **Downstairs Classroom**
- The Importance of Equity in STEAM, **Canyon Terrace**
- Navigating Science and Political Rhetoric: Strategies for Teachers to Foster Scientific Literacy and Critical Thinking in Students, **CREATE Public Hall**
- AI for Educators, **CREATE The Zones**



EXHIBITORS

Arizona Science Center Level 1

- Arizona Science Center
- American Institute of Aeronautics and Astronautics
- Basha High
Science is Fun
- Bear Essential News
- BioSense
- Center for Semiconductor Manufacturing
- Challenge Island-Chandler
- Chief Science Officers
- City of Surprise - HSCV
- Dignity Kids, Inc.
- Eastern Arizona College
- GenTech
- Heritage Square Foundation
- Joaquin Bustoz Math-Science Honors Program
- Maricopa County Air Quality Department
- MARICOPA COUNTY ENVIRONMENTAL SERVICES
- SciTech Institute
- Southwest Human Development
- STEM Sports
- Southwest Sustainability Innovation Engine
- University of Arizona School of Mining and Mineral Resources
- University of Arizona College of Engineering
- Viasat



SESSION DESCRIPTIONS

IRENE P. FLINN GIANT SCREEN THEATER

9:00 AM - 9:30 AM

Opening Session

- Maiya Cheeks - STEM Ecosystem Program Manager, SciTech Institute
- Claire Conway - STEM Ecosystem Director, SciTech Institute
- Beth Nickel - Chief Learning Officer, Arizona Science Center
- Steven Zylstra - President & CEO, Arizona Technology Council & SciTech Institute
- Guy Labine - The Hazel A. Hare President & CEO, Arizona Science Center
- RJ Muller - Director, Public Affairs, Cox Communication

9:30 AM - 10:15 AM

Broadband 101

- Jamie Garrett - Senior Broadband Program Manager, Arizona Commerce Authority State Broadband Office
- Joe Van Galder - Broadband Coordinator, Arizona Department of Transportation

Join us for a dynamic exploration of Broadband in Arizona, co-hosted by Arizona Commerce Authority and Arizona Department of Transportation!

1:00 PM - 1:45 PM

Flash talks: West Valley Chief Science Officers, Arizona Coalition for Career Readiness, My Future AZ/Pipeline AZ, and GenTech

- Chief Science Officers Navigating STEM Research in the Artemis Generation
- Denise Hicks, West Valley CSO (Avondale & Aqua Fria School Districts)

Our Avondale School District Chief Science Officers are excited about fostering a new generation of scientists ready to contribute to STEM research and exploration. Our presentation showcases a project designed to engage students in STEM research. It aligns with the goals of NASA's Artemis program. Our project emphasizes developing research skills, formulating questions received from our community, and presenting our findings to larger audiences.



SESSION DESCRIPTIONS

Making Career Awareness Everyone's Job and Part of Everyone's Journey

- Katherine Adams & Partners from Arizona Coalition for Career Readiness

Describe how our partners work together to bridge the knowledge and training gap between Employers needing great talent and Everyone needs a great job. Our coalition brings industry, education and technology together toward the common goal to ensure the future talent of Arizona meets employer needs and student needs of economic independence. We aim to inspire and fuel our talent pipeline!

Navigating the STEM Pipeline: Enabling Student Exploration and Ownership with My Future AZ and Pipeline AZ from Middle School to Career

- Jessica Howe, My Future AZ

- Amber Folkman, Pipeline AZ

Join us for a hands-on STEM journey tailored for you and your learning community! In this session, we'll explore My Future AZ and Pipeline AZ through real-life student stories, showing you how to guide your students from middle school to high school and beyond with confidence! Discover practical ways to help students uncover their STEM interests, connect with career pathways, and map out their educational journey. We'll share strategies to make STEM future accessible, empowering you to support your students every step of the way. Come along and see how these tools can make a difference.

Revolutionizing STEM Education: Economic Solutions for Schools

- Michael Wilson, GenTech

STEM education programs are critical for today's students to meet the needs of our increasingly tech-focused world, with a current shortage of 1 million STEM professionals and technicians in the U.S. Private companies are uniquely positioned to provide innovative solutions that address schools' budget constraints while offering students access to STEM curriculum with high-quality learning materials and technology-proficient instructors. Solutions include acquiring competitively priced equipment, rotating materials between schools to maximize resources, and providing instructors to ensure a teacher's expertise in STEM education is not lost if they retire or change positions. Independent contractors can also be advocates for STEM education, offering financial support and innovative partnerships with schools to strengthen the next generation of tech leaders and invest in the future of their local economies.



SESSION DESCRIPTIONS

3:00 PM - 3:45 PM

Creating Opportunity: Evaluating Broadband Access in Arizona

- Michelle Simon, Pima County Office of Digital Inclusion
- Kelly Mukherjee, ASU Broadband & Digital Inclusion
- Laura Etter, Sun Corridor Network

The session will provide detailed information regarding the need for affordable, high-speed internet access in all communities within Arizona. The conversation will include best practice details about mapping, evaluation, programs, and policies for improved access, adoption, and use of the internet to create opportunities for healthcare, education, and workforce/ economic development.



SESSION DESCRIPTIONS

DANIEL CRACCHIOLO THEATER (DCT DEMO STAGE)

9:30 AM - 10:15 AM

Inspecting with Maricopa County

- Jenny Frank, Maricopa County Air Quality Department
- Kristin Homuth, Maricopa County Environmental Services Department
- Conni Griffith, Maricopa County Environmental Services Department

Join Maricopa County Air Quality, Storm Water, and Vector Control to learn about our newest STEM classroom resource, Inspecting with Maricopa County. We will visit your classroom to educate students about air and storm water pollution, and mosquito control through engaging hands-on experiences. Empower students to make positive changes in their communities while meeting education standards. Learn how you can bring this exciting event to your classroom, free to schools within Maricopa County.

10:30 AM - 11:15 AM

Becoming Leaders: STEM Education Mentorship

- Catalina Olivas, Writing Lab at the Institute for the Future of Education of Tecnologico de Monterrey

This presentation will provide examples of how we work with students and professors to inspire them to be part of a global movement: empowering themselves to lead others in STEM education. By providing examples of how to set goals and collaborations, we look to inspire students, educators and industry leaders to work closely with mentors that can inspire others to be great.

1:00 PM - 1:45 PM

The Impact of the Chief Science Officers Program

- CSO Iraj & CSO Mays

Join us to hear a first-hand account of the impact the Chief Science Officers program has on the lives of students in Arizona and beyond! CSO Iraj and CSO Mays will be sharing about their experiences in the program, the importance of STEM and community impact, and how you can bring student voice to your community.



SESSION DESCRIPTIONS

2:00 PM - 2:45 PM

Building Resilient Communities in Phoenix: STEM Solutions from High School Innovators

• Bioscience High School AP Seminar Students, Bioscience High School

In this inspiring series of flash talks, current high school students will share their research about innovative STEM approaches to addressing environmental challenges specific to Phoenix, Arizona. From urban resilience and sustainable infrastructure to energy conservation, these young innovators will share real-world solutions and discuss how educators can engage and inspire their own students to explore STEM solutions in the classroom. Students will offer practical ideas and activities that they think, from a student perspective, can foster a deeper understanding of sustainability and resilience

3:00 PM - 3:45 PM

Everyone Can Be a Scientist! Inspiring Future STEM Students and Careers!

• Science is Fun Club Students, Basha High School

Basha High School Science is Fun is a community outreach STEM organization whose main goal is to inspire others to love science and to help increase their confidence in pursuing STEM oriented careers. Our motto is "Everyone can be a Scientist!"

4:00 PM - 4:45 PM

Southwest Human Development Makers of Change Challenge - Student presentations

• LouAnn Phillips, Southwest Human Development

Join us for a series of student presentations from the Southwest Human Development Makers of Change Challenge!



SESSION DESCRIPTIONS

BODY DEPOT

10:30 AM - 11:15 AM

Exploring Pathways to Bioscience & Healthcare Careers

• Bradley Bostick, Office of the Maricopa School Superintendent

Attention AZ 6th-12th grade educators! Arizona stands at the forefront of bioscience and healthcare innovations, leading to diverse career possibilities for students. Join this session to learn about free resources for teachers that include on-demand industry spotlights complete with engaging classroom tools and an easy tool to connect with industry professionals in your classroom. Gain insights on integrating career literacy, fostering real-world experiences, and cultivating career awareness in the dynamic bioscience and healthcare sectors. Don't miss out on this opportunity to enrich your teaching approach and empower your students for success in the evolving landscape of bioscience and healthcare careers.

2:00 PM - 2:45 PM

Cord Blood, Cellular Therapies, and Careers in the Classroom

• Charis Ober, Save the Cord Foundation

Save the Cord Foundation is a 501c3 education and advocacy foundation created to advance umbilical cord blood, related cellular therapies and careers to the next generation of students in Arizona. A teaching platform, CORD BLOOD IN THE CLASSROOM is currently making it's way into AZ high schools across AZ. Students learn vocabulary, career opportunities, cellular science surrounding the uncontroversial cord blood stem cells that are collected at birth and used to treat over 80 life threatening diseases via transplant. Students also learn about the many career opportunities that result from this amazing technology. AZ is the first state to implement this education program in partnership with the AZ Dept of Health and the AZ Public Cord Blood Program.



SESSION DESCRIPTIONS

3:00 PM - 3:45 PM

Enhancing Irrigation Water Management with Smart Drones and Sensors for a Sustainable Future

• Dr. Diaan Eldin Elshikha, The University of Arizona Maricopa Ag Center - Biosystems Engineering Department

The session on “Enhancing Irrigation Water Management with Smart Drones and Sensors for a Sustainable Future” will present how advanced drone technology and sensors are transforming irrigation practices. Attendees will gain insights into the application of these technologies for optimizing water use, monitoring crop health, and advancing sustainability. The discussion will highlight practical examples, illustrating how these innovations are benefiting businesses, community organizations, and educational institutions. This session aims to provide a comprehensive understanding of how smart technology is shaping the future of efficient and sustainable irrigation.



SESSION DESCRIPTIONS

DOWNSTAIRS CLASSROOM

9:30 AM - 10:15 AM

Taking Science 2 the Max: Reimagining Science Through Digital Integration

- Dr. Yoonhee Lee, Playful Digital Learning LLC
- Bryheem Charity, Science 2 the Max

This session will demonstrate how to integrate science experiments into the digital world through an engaging classroom storyline. We'll explore innovative practices that combine a science lab with the video game Minecraft, bridging hands-on science with digital learning. Initially, we'll conduct interactive experiments using the Maximus storyline, aiming to ignite a passion for science, foster lifelong curiosity, and help children grasp fundamental concepts while developing critical thinking skills. Following this, we'll transition the science experience into Minecraft, where students will apply their knowledge in a dynamic virtual setting, enhancing their understanding through immersive virtual learning experiences.

10:30 AM - 11:15 AM

Empowering Students to Use AI for Scientific Inquiry: 5 Critical Thinking Skills for Middle and High School Classrooms

- Jacquelyn Kelly, University of Phoenix

In this session, we'll explore how to empower middle and high school students to harness AI tools for scientific inquiry. You'll learn five essential critical thinking skills—planning, problem formulation, interpretation & synthesis, validation, and efficiency—that are key to guiding students in effectively using AI. By integrating these skills into your classroom, you'll help students not only understand AI but also apply it in a way that mirrors the scientific inquiry process, fostering deeper engagement and learning. This session will provide practical strategies and resources to seamlessly incorporate AI-driven inquiry into your existing curriculum.



SESSION DESCRIPTIONS

1:00 PM - 1:45 PM

Bridging Classrooms and Chips - A Teacher Workshop

- Peter Baltu, Baltu Technologies
- Nick Irigoyen, Semi Foundation
- Perla DeBaggis, Semi Foundation

The SEMI Foundation, in collaboration with Baltu Technologies, will host an interactive workshop featuring hands-on activities with MicroBits and a virtual reality experience that immerses participants in a semiconductor industry clean room. Led by experts from Baltu Technologies and the SEMI Foundation, this workshop will showcase how these tools can be integrated into K-12 classrooms to enhance STEM education and inspire the next generation of semiconductor professionals. Participants will explore the importance of introducing semiconductor technology early in education to better prepare students for future careers in this critical industry.

2:00 PM - 2:45 PM

Empowering Communities Through Citizen Science to Improve Environmental & Human Health

- Emma Giles, SciStarter

Community centers across the country are transforming community engagement by becoming vibrant hubs for citizen science, where people of all ages and backgrounds can actively participate in real scientific research. With the support of SciStarter, an innovative online engagement platform, you have access to resources to engage the community in science research that matters to you, from using tools to assess your indoor air quality, to playing a game to advance Alzheimer's Disease research. In this session, you will learn about this movement, why it matters, and we'll participate in a project together.

3:00 PM - 3:45 PM

Beyond Skynet: Embracing AI as a Collaborative Tool

- Eshe N Pickett, Intel Corp.

There is a pervasive fear that AI will replace us. In this workshop, we'll explore how Generative AI can be your ally. You will learn to harness AI for tasks like writing assistance, debugging, and more, through real-life examples. We will address the challenges of AI hallucinations and share verification best practices. Plus, you'll deploy a local AI assistant—no external account needed. Transform your AI apprehension into productivity by experiencing how AI can enhance, not replace, your work.



SESSION DESCRIPTIONS

4:00 PM - 4:45 PM

Bioinformatics in the Classroom – Mining the Information in DNA & Proteins

• Uwe Hilgert, BIO5 Institute/University of Arizona

Bioinformatics gives students the unprecedented opportunity to mine DNA and protein sequences while working with the same computer tools and data that scientists use. Come and learn how to use freely available online tools to guide your students to consolidate their knowledge of biological concepts and discover the connectedness of all life. (Participants are encouraged to bring their laptops to follow the exercises presented.)



SESSION DESCRIPTIONS

CANYON TERRACE

9:30 AM - 10:15 AM

Edison Robots in the Classroom (*Free Edison Robot Included*)

• Jennifer Petersen, Arizona Science Center

The Edison Robot Professional Development workshop provides educators with a hands-on introduction to integrating Edison robots into their classroom activities. Participants will learn how to use these versatile robots to teach STEM concepts, coding, and problem-solving skills in a fun and engaging way.

10:30 AM - 11:15 AM

Digital Equity Round Table Discussions

- Dr. Erin Carr-Jordan, Institute for Digital Inclusion Acceleration
- Anthony Costantini, Arizona State Library
- Michelle Simon, Pima County Office of Digital Inclusion
- JoLynn Houk, Cox Communications
- Lupe Valenzuela, Chicanos Por La Causa
- AZSTRUT
- Ilana Lowery, Common Sense Media

Join us for a dynamic roundtable discussion about digital equity in Arizona, moderated by Dr. Erin Carr-Jordan from the Institute for Digital Inclusion Acceleration. This guided conversation will be supported by table leaders who are experts in the field from Arizona State Library, Pima County Office of Digital Inclusion, Cox Communications, AZ STRUT, Common Sense Media, and Chicanos Por La Causa.

4:00 PM - 4:45 PM

The Importance of Equity in STEAM

• Angela Salazar, YWCA Metropolitan Phoenix

Explore the critical role of equity in Science, Technology, Engineering, Arts, and Mathematics (STEAM). Participants will learn how promoting diversity and inclusion in these fields benefits not only marginalized communities but also society as a whole. The session will highlight barriers faced by BIPOC and underrepresented groups, and provide actionable strategies for creating more equitable opportunities in STEAM education and careers.



SESSION DESCRIPTIONS

CREATE PUBLIC HALL

9:30 AM - 10:15 AM

Innovations in Energy and Carbon Panel

- Moderator: Dr. Thomas B. Wilson, SciTech Institute, Workforce Development & Post-Secondary Education Coordinator
- Edwin Hernandez-Vargas, Korepower, Manager of State and Local Affairs
- Gabriel Sanchez Munoz, Governor's Office of Resiliency, Energy Grants Program Officer

Sessions Description: In this engaging session we will be uncovering cutting edge technologies in energy storage, learn more about the policies and practices associated with a statewide climate action plan, and discover ways to use atmospheric carbon as a source of vehicle fuel.

10:30 AM - 11:15 AM

Bridging Classrooms and Chips: A Panel Discussion

- Moderator: Perla DeBaggis, Semi Foundation
- Rachna Mathur, ASU Prep, ASU, STEMology
- Raquel Diaz, Trevor G. Browne High School
- Kenneth Mims, Neurodiversity Education Research Center

The SEMI Foundation will host a dynamic panel discussion featuring a high school STEM teacher, a Senior STEM Strategist for K-12, an industry expert, a woman leader in the semiconductor field, and a district administrator. Together, they will explore the critical role semiconductors play in education across all grade levels, highlighting the importance of integrating this technology into classrooms from K-12 and beyond.

1:00 PM - 1:45 PM

Diverse Jobs of Broadband Panel

- Moderator: Will Novak, Google Fiber
- Jeanine Watanabe, Cox Communications
- Ethan Barlow, SRI Contracting
- Larry Streech, Granite

In this session we will be exploring the MANY career opportunities for Arizonans in and around the field of Broadband! Join us for a dynamic panel discussion with key employers as they talk about jobs, training opportunities, and more.



SESSION DESCRIPTIONS

3:00 PM - 3:45 PM

How to Build STEM minded students through the Math Practices

- Marisa Tualla, Arizona Department of Education
- Eboney McKinney, Arizona Department of Education
- Laurel Cherry, Arizona Department of Education

This session will explore strategies to foster students' critical thinking, problem-solving, and perseverance in STEM fields. Participants will learn practical techniques to cultivate a growth mindset, encourage collaboration, and develop effective communication skills. The session will delve into specific mathematical habits of mind, such as modeling, using tools strategically, and attending to precision. By implementing these strategies, educators can empower students to become confident and successful STEM learners.

4:00 PM - 4:45 PM

Navigating Science and Political Rhetoric: Strategies for Teachers to Foster Scientific Literacy and Critical Thinking in Students

- Jacquelyn Kelly, University of Phoenix

In this workshop, K-12 teachers will gain practical strategies for addressing the complexities of political rhetoric alongside scientific information. We'll explore methods to help students build scientific literacy, sort through misinformation, and communicate effectively from a scientific perspective. Teachers will learn how to guide students in recognizing when communication is influenced by political rhetoric and how to ground their understanding in robust scientific knowledge. This session is designed to equip educators with actionable tools to foster critical thinking and effective communication skills in their students, enhancing their ability to navigate and interpret complex information.



SESSION DESCRIPTIONS

CREATE THE ZONES

10:30 AM - 11:15 AM

Authentic Research and Innovation Pathways (4-12)

- Rachna Nath, Arizona Science Center

This session will give teachers some direction on authentic ways to find problems and come up with innovative solutions to make students critically analyze issues and come up with real world problem solutions.

1:00 PM - 1:45 PM

Sustainability Panelist Quiz and Community Feedback

- Dr. Thomas B. Wilson, SciTech Institute, Workforce Development & Post-Secondary Education Coordinator

Join the leaders of the STEM & Innovation Summit's Sustainability Track to be quizzed on favorite sustainability fun facts and discuss the sustainability goals and attitudes of our communities.

2:00 PM - 2:45 PM

Makers Making Change: Arizona Chapter

- Matthew Levac, ACCEL

There is a growing movement to connect those in the MAKER community with the field of Assistive Technology. This presentation will introduce participants to the Neil Squire Society and the Makers Making Change Arizona Chapter. It will also focus on how to find and create assistive technology tools on the Makers Making Change website for makers to use to help individuals with a disability. It will help define what and who a MAKER is as well as other AT Maker terms such as open source and crowd sourcing.



SESSION DESCRIPTIONS

3:00 PM - 3:45 PM

Building a Positive and Sustainable Space Future: Inspiring Participation with the ASU Interplanetary Initiative

- Katherine McConachie, ASU Interplanetary Initiative
- Brooke Owen, ASU Interplanetary Initiative
- Eric Stribling, ASU Interplanetary Initiative

Join us for an interactive workshop showcasing the ASU Interplanetary Initiative, dedicated to shaping a sustainable future in space. Participants will explore diverse educational offerings and collaboration opportunities designed to engage everyone in building a positive space future. Through interactive activities, attendees will discuss humanity's future in space, tackling big questions like, "What might we discover when gravity is dialed back?" and "How will people really react to discovering life on other planets?" Collaborate with peers to brainstorm ways to implement these innovative activities in your educational contexts.

4:00 PM - 4:45 PM

AI for Educators

- Jazz Cano, Arizona Science Center

AI seems to be everywhere nowadays. As educators, we are tasked with understanding, leveraging, and even possibly teaching this new and dynamic tool. Understanding AI fundamentals can help educators be more prepared for proper integration of technology, better leverage student learning, and take back our time as educators. Together, dive into popular AI tools, identify AI basics, and identify how we can use it to educate students while growing as educators.



SESSION DESCRIPTIONS

CREATE CLASSROOM

9:30 AM - 10:15 AM

Making Small Adjustments for Big Outcomes, Combining Computer Science and Math!

- Alecia Henderson, Arizona Department of Education
- Marisa Tualla, Arizona Department of Education

Are you a K-5 teacher interested in learning more about how you can make small adjustments to effectively implement Arizona's Computer Science Standards into your math classroom? Join us for an interactive, hands-on session where we will explore examples of how to integrate and connect computer science into the mathematics classroom.

10:30 AM - 11:15 AM

Increasing Representation in STEM starts in K-12

- Ava Javid, Beyond 100k
- Brenna Chambers, Arizona Science Center

This session aims to highlight the critical importance of diversity and representation among K-12 STEM teachers, some of the most influential stakeholders in supporting Black, Latinx, and Native American students in pursuing STEM careers. Through personal stories and data-driven insights, we aim to raise awareness about the impact of representation on students' educational experiences and future STEM careers. Our goal is to discuss challenges, showcase effective solutions, and inspire collective action among attendees to foster inclusivity and belonging in STEM education.

1:00 PM - 1:45 PM

Strategies to Meet the Needs of All Learners

- Rebecca Zier, Arizona Science Center

Learn effective strategies to support and engage all learners, fostering an environment where every student can thrive! Discover practical tools and insights to create a science classroom that is welcoming, equitable and inspiring for all students.



SESSION DESCRIPTIONS

2:00 PM - 2:45 PM

STEM in the Arts

- Maree Toscano, Arizona Science Center

Through hands-on activities and collaborative discussions, educators will explore the intersection of STEM and the arts. Discover innovative strategies for integrating science, technology, engineering and mathematics to foster cross-disciplinary collaboration in your classroom. Leave with tools and ideas to enhance your curriculum and engage students in dynamic, multi-dimensional learning experiences.

3:00 PM - 3:45 PM

A Peek Below: How Geologists Search for Mineral Resources

- Chris Earnest, University of Arizona School of Mining and Mineral Resources
- Dan Moreno, University of Arizona School of Mining and Mineral Resources

Become an exploration geologists to collect data about what rocks and mineral resources are buried deep underground in a simulated slice of the earth's crust. Use that data to build a simple geologic model of the rocks below. Explore how geologists in Arizona work to find the mineral resources society uses every day. This activity is a great addition to 6-12 science classrooms.



SAVE THE DATE

FEBRUARY 2025



ARIZONA
SCITECH
festival®

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FRIDAY, JANUARY 24, 2025

8:30 A.M. – 3:30 P.M. | COST: \$30

Join Arizona Science Center for a day of
inspiration, innovation and fun!

REGISTRATION BENEFITS:

- Breakfast and lunch
- Chance to win great raffle prizes
- Free educator swag
- Free Educator Membership compliments of APS

To learn more and to register, visit azscience.org/e2i or

SCAN HERE





Innovating and investing in Arizona since 1979

In 2025, Intel will celebrate its 45th anniversary in Arizona. Innovating and investing in education and the next generation of Arizona's innovators will help make our community a more vibrant place for everyone.

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