



Hawaii  
**STEM**  
Conference

STUDENT PROGRAM  
**APRIL 4-5**  
**2024**  
HAWAII CONVENTION  
CENTER



# TIME TO CELEBRATE STEM! TABLE OF CONTENTS

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# ALOHA AND WELCOME

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We are so excited to have you with us for the 15th annual Hawai'i STEM Conference!

Over the next two days, we hope you are inspired as you dive into activities and learn about new STEM fields and careers.

# THANK YOU TO OUR SUPPORTERS!

## FUNDERS



Kamehameha Schools®



MEDB Ke Alahele  
Education Fund



AIR & SPACE  
**STEM Outreach**  
Air Force Research Laboratory - Maui



HAWAI'I P-20  
Partnerships for Education  
*Spark. Transform. Excel.*

## GOLD SPONSORS



The Groth Family  
Foundation

## STAR PARTY SUPPORTERS



## ABOUT STEMWORKS™

As the flagship program of Maui Economic Development Board, STEMworks is a service-learning initiative designed to engage, inspire, and motivate K-12 students so that they will pursue careers in STEM and create a better world. STEMworks trains students and teachers in industry-standard technology and engineering design practices using hands-on curricula, regional conferences, and both in-person and virtual workshops.

Our goal is to work with educators, industry partners, and community members to build a strong STEM education-to-workforce pipeline across Hawai'i.



## OUR MISSION

To provide students and teachers with resources, inspiration, and tools that empower them to improve their community and the world.

## STEMWORKS SCHOOLS

### LANA'I

Lana'i High and Elementary School

### KAUA'I

Hanalei Elementary School  
Kaua'i High School

### HAWAII

Kea'au High School  
Kealakehe High School  
Keonepoko Elementary  
Waimea Middle School

### MOLOKA'I

Kaunakakai Elementary School  
Moloka'i High School  
Moloka'i Middle School  
Moloka'i Middle: 'O Hina I  
Ka Malama  
'O Hina I Ka Malama Moloka'i  
High School

### O'AHU

'Aiea Intermediate  
'Ewa Makai Middle School  
'Ilima Intermediate School  
Kaimuki High School  
King Intermediate  
Leilehua High School  
Mililani High School  
Moanalua High School  
Nānākuli High and  
Intermediate School  
Wahiawā Middle School  
Waipahu High School  
Waipahu Intermediate School  
Washington Middle School  
Wheeler Middle School  
Wilson Elementary School

### MAUI

Ha'ikū Elementary School  
Hāna High School  
Hawai'i Technology Academy  
H.P. Baldwin High School  
Iao Intermediate  
Kalama Intermediate  
Kamali'i Elementary School  
Ke Kula Kaiapuni 'o Lahaina  
King Kekaulike High School  
Kūlanihāko'i High School  
Lahaina Intermediate School  
Lahainaluna High School  
Lihikai Elementary School  
Lokelani Intermediate School  
Makawao Elementary School  
Maui High School  
Maui Waena Intermediate  
Pukalani Elementary School

# THURSDAY, APRIL 4

**7:00am - 10:00am**

Registration & Playground

**9:30am - 4:30pm**

On-site Competitions

**10:00am - 10:45am**

Opening Keynote

**11:00am - 12:00pm**

5x5 Networking

**12:00pm - 1:00pm**

Lunch

**1:00pm - 2:30pm**

Playground & Showcase

**2:30pm - 4:00pm**

Professional Development 1

**3:30pm - 4:30pm**

Playground

**5:00pm - 8:30pm**

E-sports Tournament

**6:00pm - 8:30pm**

Star Party



# FRIDAY, APRIL 5

**7:00am - 7:45am**

Registration

**7:45am - 8:00am**

Group Photo

**8:00am - 11:30am**

On-site Competitions

**8:00am - 9:30am**

Professional Development 1

**9:45am - 11:15am**

Professional Development 2

**11:15am - 12:45pm**

Lunch

**12:45pm - 1:15pm**

Keynote

**1:15pm - 3:15pm**

STEMMYs Award Ceremony



# THURSDAY, APRIL 4

<b>7:00am-8:30am</b>	Registration	In front of 317A
<b>9:00am-10:00am</b>	Playground	316AB
<b>10:00am-11:00am</b>	Opening Keynote	Kalakaua Ballroom
<b>11:00am-12:00pm</b>	5x5 Networking Session	Kalakaua Ballroom
<b>12:00pm-1:00pm</b>	Lunch and Social	Kalakaua Ballroom
<b>1:00pm-2:30pm</b>	Playground and Student Showcase	316AB

## **2:30pm-4:00pm** Professional Development 1

Learn to Play the Ukulele with Fractions - Mary Keenan	301A
Tapping into the Power of Emotional Intelligence: Mentorship and Feedback - Kevin Lim	301B
Cybersecurity and You - Aaron Thomas	304A
STEM Entrepreneurship: Empowering Innovation - Katie Taladay	305A
Connecting Hawai'i to the Global Economy with Technology - Edward White	305B
20 Bean Salary - Guanalin Gao	306A
Building Your Career in Tech is Smart - Deena Tearney	306B
Hawai'i Astronomy and the Maunakea Observatories - Leinani Lozi	307A
Art for Game Development and Design - Joseph Abraham	319B

## **3:30pm-4:30pm** Playground

Kalakaua Ballroom

## **9:30am-4:30pm** Competitions

Recap Video in partnership with PBS HIKI NO	302A
Entrepreneurship in partnership with VentureLab	302B
Natural Resources in partnership with Kupu	303A
App Development in partnership with ICSpark	303B
AI Bot in partnership with d'Skills	304B

## **5:00pm-8:30pm** E-Sports Tournament

Kalakaua Ballroom

## **6:00pm-8:30pm** Star Party

Kalakaua Ballroom

# FRIDAY, APRIL 5

<b>7:00am-7:45am</b>	Registration	In front of 317A
<b>7:45am-8:00am</b>	Group Photo	Rooftop
<b>8:00am-11:30am</b>	Recap Video Competition	302A
<b>8:00am-9:30am</b>	Professional Development 1	
	STEM Bucket Challenge - Melanie Ho and Lisa Loo	301A
	Interdisciplinary Place-based Learning - Esjhalee Man and Mikayla Alonzo	301B
	Forensic Science Program at Chaminade University of Honolulu - Carlos Gutierrez	303A
	Science of Flight - Introduction to Aerodynamics - Darryl Ng	303B
	A Portfolio Tour with Anthony Francisco: Marvel Studios and Selected Works - Anthony Francisco	304A
	U.S. Space Force - Space Systems Command's Space STEM Program - Jonathan Stroud and Others	304B
	Using Gimkit for Studying and Creative Growth with Computer Science Concepts - Sean Yannell and Crystel Sundberg-Yannell	305A
	The Future of Health Career Exploration - Ke'ahi Darby	305B
	Preceon Smart Corn Innovations - Tara Burke and Marisa Akiona	306A
	Mars2020 - Vincent Smith	306B
	STEM and Mindful Entrepreneurship - Jonn Kim	307A
	Customizing Vinyl Decals using Cricut Design Space - Lea Ramos, Isabelle Crippen, Janzen Gio Cubabangbang, and Natalie Entrata	321B
<b>9:45am-11:15am</b>	AI Image Storytelling Competition	302B





**9:45am-11:15am**

Professional Development 2

Community/School Collaborative Projects - Gabriel Go and Colton Mills

301B

Extending our Aloha 'Āina Reality - Daniel Kinzer

303A

Science of Flight - Introduction to Aerodynamics - Darryl Ng

303B

Elements of Visual Storytelling - Anthony Francisco

304A

Creative Coding - Brad Ashburn

304B

"Paging Dr. Sleuth!" The STEM Detective - Jaimie Tom, MD

305A

The Future of Health Career Exploration - Ke'ahi Darby

305B

Preceon Smart Corn Innovations - Tara Burke and Marisa Akiona

306A

A Tour of Machine Learning: From Dartmouth to OpenAI - Daniel Lim

306B

Does AI stand for Ain't Intelligent? - Jonn Kim

307A

Entrepreneurship and Invention - Collin Kobayashi

319B

Industry/School Collaborative Projects - Rachel Chidester, Stella Blanchard, and Aubrey Bechard

321B

**11:15am-12:45pm**

Lunch and Playground Opens

302B

**12:45pm-1:15pm**

Keynote Speaker

Kalakaua Ballroom

**1:15pm-3:15pm**

STEMMY Award Ceremony

Kalakaua Ballroom

# ALL PAU!

Thank you for powering these two days with discovery, curiosity, and innovation.

# INTRODUCING OUR KEYNOTE SPEAKERS



## JASON BAUM

**AWARD WINNING FILMMAKER**



Jason Baum is an award-winning filmmaker originally from Maui, Hawai'i and a graduate of New York University's Undergraduate Film Program. He has been nominated for an Emmy and five Grammys, including a win for Kendrick Lamar's music video for "HUMBLE." Other awards include Cannes Lions, Clios, and MTV VMAs, and his films have been official selections at Sundance, SXSW, and Tribeca. His work has over 5.45 billion views on YouTube and can be found on almost every major streaming platform, including Netflix, Amazon Prime Video, Disney+, and Apple TV+.



## HANNAH GRADY WILLIAMS

**FOUNDER OF D'SKILLS**



Hannah Grady Williams is an entrepreneur and founder of d'Skills, a startup that prepares high school students for careers in an AI-powered future. Hannah began her entrepreneurial journey at an early age, started college at 14, and graduated at 18 with a degree in international business. Now at 25, Hannah has made it her mission to equip students with the skills, mindsets, and real-world experience needed to thrive in the age of AI. Through d'Skills, motivated teens learn digital skills like coding as well as how to use AI tools, converting their knowledge into paid projects with small businesses. Hannah's goal is for students to graduate from high school with robust portfolios and connections rivaling most college grads.

# INTRODUCING OUR SPECIAL GUESTS



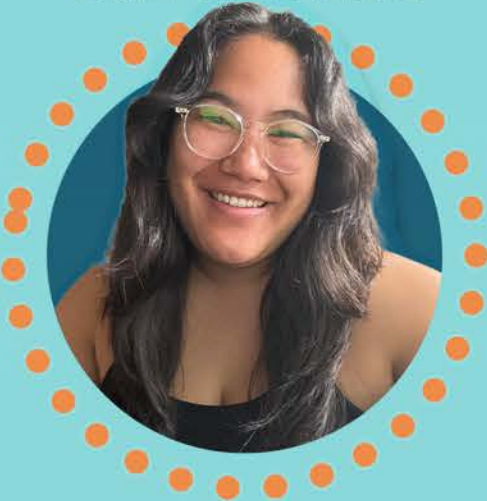
## ANTHONY FRANCISCO

CREATIVE DIRECTOR AT DOLPHIN ENTERTAINMENT  
AND FORMER ARTIST AT MARVEL STUDIOS



Anthony is the concept artist behind some of the most beloved and iconic characters in the Marvel Cinematic Universe. He is best known for designing on of Marvel's cutest characters: Baby Groot! Other characters he has designed include Loki for *Thor: Ragnarok* and the costumes for the Dora Milaje (Okoye and Nakia) for *Black Panther*. He has also worked on *Guardians of the Galaxy*, Volumes 1, 2, and 3; *Captain Marvel*; *Avengers: Infinity War*; *Avengers: Endgame*; *Ant-Man*; *Ant-Man and the Wasp*; and *Doctor Strange*!

## CHELSEA KAU



Chelsea Kau, Marketing Strategy and Business Development at Sae Design Group. Born and raised on Maui, Chelsea Kau is a proud Baldwin Bear and STEMworks alumna, which has driven her to serve on the board for HP Baldwin High School's Foundation, and regularly volunteers with the STEMworks program.

## EMCEES



Jeffrey Ho, a Freshman at Maui High School, has been a part of the MEDB and STEMworks programs on Maui for an ongoing 6 years. Through STEMworks he developed a passion for robotics and has led him and his teammates to place highly in multiple VEX IQ state championships and invitations to the VEX IQ World Championships 5 times.

# PROFESSIONAL DEVELOPMENT STUDENT PD SESSIONS

## LEVEL: HIGH SCHOOL BUILDING YOUR CAREER IN TECH IS SMART



**DEENA TEARNEY**  
Founder and CEO Pacific  
Point Inc.

No matter your skills or interests, there are many rewarding technology career pathways open to you. Come learn about your options and begin planning for your future in the tech industry!

## LEVEL: MIDDLE AND HIGH SCHOOL SCIENCE OF FLIGHT INTRO TO AERODYNAMICS



**DARRYL NG**  
Hawai'i Wing Director of Development  
Civil Air Patrol

Come learn about scientific theories that explain how airplanes create lift and fly! This session will introduce you to the laws of physics that make flight possible.

## LEVEL: ALL GRADES U.S. SPACE FORCE - SPACE SYSTEMS COMMAND'S STEM PROGRAM



**JESSICA CROOK**  
STEM Deputy Director



**JONATHAN STROUD**  
STEM Deputy Director



**NICOLE PALMER**  
Chief Engineer



**NICOLE TIBBETTS**  
STEM Executive Lead

Learn about space, rockets, and satellites from engineers and educators working for the U.S. Space Force's Space Systems Command. Engage with hands-on STEM activities, including a paper rocket build and launch on a pneumatic launcher. Your rocket could go 100 feet in the air!

## LEVEL: HIGH SCHOOL CREATIVE CODING



**BRAD ASHBURN**  
Associate Professor at the  
University of Hawai'i West Oahu

Explore, iterate, and discover how computer code can be a medium for artistic expression. Participants will unleash their creativity using the Processing framework and Python to transform their code into beautiful works of art. Albert Einstein once said, "The greatest scientists are always artists as well." Become a code artist today!

## LEVEL: HIGH SCHOOL A TOUR OF MACHINE LEARNING FROM DARTMOUTH TO OPENAI



**DANIEL LIM**  
Educational Specialist and Associate Professor  
Hawai'i Department of Education and Duke University

Machine Learning (ML) is everywhere and is changing everything! Come and learn about its historical origins and gain a high level understanding of actual ML algorithms through hands-on analysis of real datasets. Then we'll use these concepts to get a better understanding of the Large Language Models that underlie OpenAI's ChatGPT and make them smarter.

# PROFESSIONAL DEVELOPMENT STUDENT PD SESSIONS

LEVEL: HIGH SCHOOL  
MARS 2020



**VINCENT SMITH**  
IT Manager  
at Boeing

Delve into the NASA Perseverance Rover's mission to Mars. Learn about historical perspectives on Mars, the scientific exploration of Mars, preparation of the Perseverance Rover for the flight to Mars and landing on the planet, the rover's current status, and the future of human exploration.

LEVEL: HIGH SCHOOL  
SCIENCE OF FLIGHT  
INTRO TO AERODYNAMICS



**EDWARD WHITE**  
Machine Learning Engineer

In the era of globalization and the internet, it's easier than ever to connect Hawai'i to the global economy. Learn about how you can use technology and strategic thinking to have a worldwide business without leaving Hawai'i!

LEVEL: ALL GRADES  
STEM BUCKET CHALLENGE  
BUILD AND RETRIEVE



**MELANIE HO**

Hardware Science Education Specialist and Special Projects Manager

Get ready to put your skills to the test! Participants will face the challenge of constructing something using the items in a net covered bucket. The true test lies in creating a tool to retrieve the items.



**JOY SHIMABUKURO**

LEVEL: HIGH SCHOOL  
20 BEAN SALARY: THE SCIENCE AND  
ART OF MANAGING LIMITED RESOURCES



**GUANLIN GAO**

Associate Professor of  
Economics at Chaminade University

Learn the essentials of personal finance management. Navigate the complexities of budgeting, saving, and investing with a limited resource pool. Lets combine scientific principles with financial decision-making to apply these skills in real-world scenarios.

LEVEL: HIGH SCHOOL  
"PAGING DR SLEUTH!":  
THE STEM DETECTIVE



**JAIMIE TOM**

Associate Director of Admissions at University of Hawai'i, John A. Burns School of Medicine

In this interactive session, you will learn to use your critical thinking skills to solve the medical mystery of what happened to Parker, a 16 year old male found down at the park. Use your detective skills to figure out what's wrong with him and get him the help he needs before it's too late!

LEVEL: ALL GRADES  
USING GIMKIT FOR STUDYING AND CREATIVE  
GROWTH WITH COMPUTER SCIENCE



**SEAN YANNELL**

Computer Science and Media Teacher  
Lokelani Intermediate School



**CRYSTEL SUNDBERG-YANNELL**

English Teacher  
King Kekaulike High School

Learn the basics of creating flashcards using Gimkit to study for any subject in a fun and engaging way! You'll also be introduced to Gimkit Creative, which lets you design your own games. Your imagination is the only limit.

# PROFESSIONAL DEVELOPMENT STUDENT PD SESSIONS

LEVEL: HIGH SCHOOL  
**EXTENDING OUR ALOHA 'ĀINA  
REALITY: BUILD YOUR OWN  
'ĀINA WORLDS AND 3D MAPS**



**DANIEL KINZER**  
Lead Community Technologist  
Purple Mai'a Foundation

Build your own 3D immersive XR worlds that reflect your favorite places from across the islands! Using tools like drones, iPads, smartphones, Insta360, and GoPro cameras, you'll be ready to build your own virtual worlds together with your friends.

LEVEL: MIDDLE SCHOOL  
**STEM AND MINDFUL  
ENTREPRENEURSHIP**



**JONN KIM**  
CEO and Chairman of  
Geeks and Nerds (GaN) Corporation

STEM is a foundation of the future, and through mindful entrepreneurship, we can develop profitable businesses that help shape the future of our community. This presentation chronicles the experiences and lessons Dr. Kim, who is a lifelong innovator with 40 years of experience as engineer, researcher, professor, manager, and entrepreneur.

LEVEL: MIDDLE SCHOOL  
**LEARN TO PLAY UKULELE WITH FRACTIONS**



**MARY KEENAN, MAE MASUDA-KOP, ABE LAGRIMAS**  
Music Educators at Lōkahi: The Ukulele Collective

Come get hands on as we walk you through how to use ukulele rhythms to add fractions! Join us to learn how to read rhythm, connect rhythm to math, and experience the fun of playing the ukulele along the way. Wrap it up with a familiar tune that will have you wanting even more music integrated into your school day!

LEVEL: HIGH SCHOOL  
**STEM ENTREPRENEURSHIP:  
EMPOWERING INNOVATION**



**KATIE TALADAY**  
Director of Education and Workforce  
Development at STEMworks

Take STEM ideas to business pitch, explore the dynamic intersection of STEM fields and entrepreneurship. Discover how innovation thrives at this nexus and gain valuable insights on navigating challenges and seizing opportunities in the evolving landscape of technological entrepreneurship.

LEVEL: HIGH SCHOOL  
**TAPPING INTO THE POWER OF  
EMOTIONAL INTELLIGENCE:  
MENTORSHIP AND FEEDBACK**



**KEVIN LIM**  
Founder of Hawai'i Tech Mentors

Unlock the secrets to thriving in STEM through dynamic mentorship relationships, centered on the power of feedback and emotional intelligence. Learn the foundational elements of healthy mentorships emphasizing the mutual benefits for mentors and mentees.

# PROFESSIONAL DEVELOPMENT STUDENT PD SESSIONS

## LEVEL: ALL GRADES ENTREPRENEURSHIP AND INVENTION



**COLLIN KOBAYASHI**  
Founder of 3D Innovations

Learn how you can transition your design projects into inventions through entrepreneurship. Hear about how one student turned her project into an invention, patent, and product!

## LEVEL: ALL GRADES ART FOR GAME AND APP DEVELOPMENT



**JOSEPH ABRAHAM**  
Computer Teacher and Developer at  
Maui Game Studio, Pukalani Elementary

Come learn how to implement art into a pre-existing app or game with free software! Assets will be implemented into the Godot game engine, and the game will be playable by the end of the workshop.

## LEVEL: HIGH SCHOOL THE FUTURE OF HEALTH EXPLORATION



**KE'AHÍ DARBY**  
HCOP Program Associate



**ZACHARY OGLESBY**  
HCOP Specialist



**MARY PISO**  
HCOP Program Associate

In this workshop, you will learn about health career exploration opportunities through AHEC's Hawai'i Pre-Health Career Corps (PHCC). We will explore how virtual reality (VR) Simulation is growing as a new way of training to promote health careers.

## LEVEL: HIGH SCHOOL DOES AI STAND FOR "AIN'T INTELLIGENT"?



**JONN KIM**  
CEO and Chairman of  
Geeks and Nerds (GaN) Corporation

Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL) are highly mathematical fields of technology. The majority of media and the public misunderstand these terms and create unrealistic expectations, hype, and sometimes even fear. This session will describe the history of AI, the inner workings of DL, and how AI, ML, and DL will impact society.

## LEVEL: ALL GRADES PRECEON SMART CORN INNOVATIONS



**MARISA AKIONA**  
Nursery Operations  
Lead at Bayer



**TARA BURKE**  
Land Strategy  
Manager at Bayer

Learn about Smart Corn DNA and pollination through a hands-on demonstration that involves the physically transferring pollen from the tassels to the silks of the corn ears. Also create a Smart Corn DNA bracelet, representing the genetic makeup of the smart corn to take home as a souvenir!

# PROFESSIONAL DEVELOPMENT STUDENT PD SESSIONS

LEVEL: ALL GRADES

## A PORTFOLIO TOUR WITH ANTHONY FRANCISCO: MARVEL STUDIOS AND SELECTED WORKS

Join concept artist and character designer Anthony Francisco as he presents his work and discusses his career. Students are encouraged to bring their own portfolios to share!



**ANTHONY FRANCISCO**  
Creative Director and Concept Artist  
at Dolphin Entertainment

LEVEL: ALL GRADES

## ELEMENTS OF VISUAL STORYTELLING

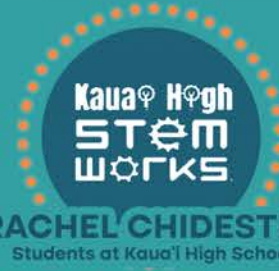
Learn how to craft compelling and intricate stories through visual art from concept artist and character designer Anthony Francisco. Bring your imagination and your sketchbook!

LEVEL: ALL GRADES

## FOSTERING INDUSTRY-SCHOOL COLLABORATIVE PROJECTS



**STELLA BLANCHARD**



**RACHEL CHIDESTER**  
Students at Kaua'i High School



**AUBREY BECHARD**

Hear firsthand from STEMworks students about how they have been able to work with industry partners such as Hawai'i Gas and the Hawai'i Agricultural Foundation. The presenters will share how these collaborative projects can enhance and elevate student voices.

LEVEL: ALL GRADES

## HAWAII ASTRONOMY AND THE MAUNAKEA OBSERVATORIES



**LEINANI LOZI**

Hawai'i Education and Engagement Manager at the International Gemini Observatory, Hilo

Learn about the different types of astronomy that are practiced in Hawai'i, from navigation to telescope observations. Hear about recent discoveries from the Maunakea Observatories, like black hole mergers and exoplanets. Engage in activities demonstrating how telescopes collect data including experiments with light and spectroscopy.

LEVEL: HIGH SCHOOL

## CYBERSECURITY AND YOU



**AARON THOMAS**

Cybersecurity Program Specialist at CyberHawai'i, University of Hawai'i

Cybersecurity has become a vital part of our lives as the digital world continues to expand. Learn how you can protect your information by setting up cybersecurity habits, creating strong passwords (that are easy to remember!), practicing digital safety, and more!





# PROFESSIONAL DEVELOPMENT STUDENT PD SESSIONS

## LEVEL: ALL GRADES BUILDING COMMUNITY AND SCHOOL COLLABORATIONS

Kaua High  
STEM  
WORKS

**GABRIEL GO**

Kaua High  
School Student

Kaua High  
STEM  
WORKS

**COLTON MILLS**

Kaua High  
School Student

Experienced STEMworks high schoolers will lead this session and discuss how the relationship between schools and their communities can be nurtured through STEM projects. In particular, you'll learn more about utilizing web development tools, such as Open Cities, and enhancing video quality as part of community-school projects.

## LEVEL: HIGH SCHOOL THE FORENSIC SCIENCE PROGRAM AT CHAMINADE UNIVERSITY



**CARLOS GUTIERREZ**

Assistant Professor of Forensic  
Sciences at Chaminade University

Learn about the application of Forensic Sciences and Crime Scene Investigation in the criminal system and solving criminal cases. Discover the Forensic Science program at Chaminade University and Dr Gutierrez cases he has seen in his over 20 years of experience in crime scene investigation and forensic sciences.

## LEVEL: ALL GRADES MAKE YOUR OWN VINYL DECALS

Kaua High  
STEM  
WORKS

**NATALIE ENTRATA**

Kaua High  
STEM  
WORKS

**ISABELLE CRIPPIN**

Students at Kaua High School

Kaua High  
STEM  
WORKS

**LEA RAMOS**

Kaua High  
STEM  
WORKS

**JANZEN CUBANGBANG**

During this session, you'll learn how to customize vinyl decals using Cricut Design Space and Cricut Machines. Advanced STEMworks students will walk you through the process of making decals and how to use the tools needed. You'll leave with a customized decal featuring your name!

## LEVEL: ALL GRADES INTERDISCIPLINARY PLACE-BASED LEARNING

Kaua High  
STEM  
WORKS

**ESJHALEE CHUNG  
CHING MAN**

Kaua High  
School Student

Kaua High  
STEM  
WORKS

**MIKAYLA  
ALONZO**

Kaua High  
School Student

Learn about Smart Corn DNA and pollination through a hands-on demonstration that involves. During the physically transferring pollen from the tassels to the silks of the corn ears. Also create a Smart Corn DNA bracelet, representing the genetic makeup of the smart corn to take home as a souvenir!

# NETWORK WITH PROFESSIONALS

## 5X5 SESSIONS

The 5x5 session is a chance for you to meet STEM industry professionals in-person and ask them questions about how they ended up in a STEM career. Student groups will stay seated at the tables set up around the room, and the industry professionals will switch tables every 10 minutes. Don't be afraid to reach out after the session with follow-up questions!

**Mahalo professionals for guiding the next generation of STEM explorers, innovators, and entrepreneurs!**

**This session is sponsored by Pacific Point Inc.**

Keiki Rise

UH Manoa

RUSHwahine.com

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Hisako Film Lab

Hawaiian Host Group

Island Energy Services Downstream, LLC

Pacific Point Inc.

Office of Indigenous Knowledge and Innovation and Laboratory of Advanced Visualization and Applications, University of Hawai'i at Mānoa

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Coen Cadinha

Christine Davis

Terra Foti

Gail Godenzi

Stefan Jensen

Brad Kester

Ruby Lee

Aaron Morris

Darren Nirei

Kari Noe

Meri Peter

Deena Tearney

Sebastian Trujillo

<b>Ben Arnold</b>	Pitsco Education
<b>Deanna Bledsoe</b>	Kai Coders
<b>Charles Bowen</b>	Pacific Point Inc.
<b>Nick Bradley</b>	Stargazers of Hawaii
<b>Francisco Cha</b>	Ferguson Enterprises
<b>Cole Cabrera</b>	Pacific Point Inc.
<b>Tessa Coulter</b>	OVIC
<b>Sophia Davis</b>	University of Glasgow
<b>Kat Duran-Higa</b>	Terranox
<b>Angelic Ebbers</b>	TMT International Observatory LLC
<b>Jasmine Feliciano</b>	Raytheon Technologies/Northeastern University
<b>Heavenly Gabriel</b>	Wahine Scientist
<b>Kris Harms</b>	DNX Ventures
<b>Tyler Hiranaka</b>	Sky Elements Hawaii
<b>Kainoa Jimenez</b>	KoleaGold LLC
<b>Jennie Kaahui</b>	Hawaii Agricultural Foundation
<b>Daniel Lim</b>	Hawaii Department of Education / Duke University
<b>Leinani Lozi</b>	Gemini / NOIRLab
<b>Alvin Manglona</b>	Hawaiian Host Group
<b>Colleen Milbury</b>	The Rice Partnership
<b>Michael Munoz</b>	Hawaiian Host Group
<b>Colton Okimoto</b>	EsportsU
<b>Nicole Palmer</b>	United States Space Force - Space Systems Command
<b>Constancio Paranal</b>	Honolulu Office of Economic Revitalization
<b>Phyllis Aira Raquinio</b>	Hawai'i State Coalition Against Domestic Violence
<b>Phaedra Robinson Ph.D.</b>	RAI Hawai'i
<b>James Saal</b>	Citrine Informatics
<b>Matthew Sahara</b>	Burns & McDonnell
<b>Vincent Smith</b>	Boeing Company
<b>Samantha Sneed</b>	ES&A, Inc.
<b>Liz Stanton</b>	Hawai'i Agricultural Foundation
<b>Jonathan Stroud</b>	United States Space Force - Space Systems Command
<b>Elizabeth Tarquin</b>	CASE Consultants International
<b>Sherrie Totoki</b>	Elemental Exceleator
<b>Mike Twilbeck</b>	Kokua Analytical Consultants
<b>Jarret Yip and more!</b>	State of Hawaii Department of Human Resources

## JOIN US FOR THE 2024 STEMMY AWARDS

Celebrate the innovation and hard work of students of all ages from across the state!

# PRE-CONFERENCE COMPETITIONS

- ▶ **Less Screens, More Movement!**  
Health PSA (K-5)
- ▶ **When I Grow Up!**  
STEM Career Exploration (K-5)
- ▶ **Game On!**  
Video Game Design (K-12)
- ▶ **Sustainable Schools!**  
Renewable Energy (K-12)
- ▶ **Pupule Pua'a!**  
Agricultural Ecosystem Innovation (K-12)
- ▶ **Imua Short Film**
- ▶ **Conference T-Shirt Design**  
Graphic Design (6-12)
- ▶ **Conference Sticker Mascot**  
Graphic Design (6-12)
- ▶ **Bumbai, No Vape!**  
Health PSA (6-12)
- ▶ **Hawai'i Stories Matter!**  
ArcGIS StoryMap (6-12)
- ▶ **Social Media Content**  
Marketing Content (6-12)
- ▶ **STEMworks Lab Spotlight**  
(6-12)

## ON-SITE COMPETITIONS

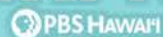


- ▶ **Natural Resources Hackathon**  
In partnership with KUPU
- ▶ Devise a management plan and prototype to clean up the Ala Wai and restore the ecosystem.



- ▶ **IT App Development Hackathon**  
in partnership with UH Mānoa ICSPark & ACM
- ▶ Create an App using Code.org's app creator

## HIKI NŌ



- ▶ **Highlight Video Competition**  
In partnership with HIKI NO PBS Hawaii
- ▶ Create a highlight video recapping the 15th Annual Hawaii STEM Conference.

## d'ski//s

- ▶ **AI Bot Challenge**  
In partnership with d'ski//s
- ▶ Students will work in groups of 2-3 to create an AI Bot using ChatGPT.



- ▶ **Entrepreneurship Competition**
- ▶ Create a business plan and marketing pitch

- ▶ **AI Image Storytelling Challenge**  
in partnership Gabriel Yanagihara
- ▶ AI Image/Story Challenge using Adobe Firefly, designed for creative writing and image creation.



# EXPLORE THE PLAYGROUND

## The Science of Kapa Exhibit

Kaulele is a traveling pop-up cultural science center and one of ten programs under the non-profit organization INPEACE, The Institute for Native Pacific Education and Culture. INPEACE's mission is to improve the quality of life for Native Hawaiians through community partnerships that provide educational opportunities and promote self-sufficiency. Kaulele's strategies to design effective, hands-on, STEM learning experiences have been successful in integrating traditional Native Hawaiian/Pacific Islander and other island minorities' scientific concepts, cultural values, and informal learning with modern STEM foci that may aid in other indigenous environments and economies.

## Planetarium Exhibit

Introducing our Air and Space STEAM outreach team, in collaboration with the Institute for Astronomy (IFA)! Get ready to blast off into the cosmos with our awesome mobile planetarium. Imagine stepping into a world beyond our wildest dreams, where stars twinkle, galaxies swirl, and planets dance around the sun. It's like having a spaceship right at your fingertips! Led by experts from IFA, our sessions are packed with cool visuals and hands-on activities that'll leave you starry-eyed and inspired.

## Exhibitors

Amazon Future Engineer (Friday Only)

'Aina Informatics, Iolani School (Friday Only)

Backyard Games

Career Conversations - Christine Davis

GirlScouts Hawaii

Growing Beyond Earth Project Exhibit

Hawaii Ag Foundation

Hawaii Science & Technology Museum

Hawaii Space Grant Consortium

Hawaii State Energy Office

Kanika Sood, California State University, Fullerton

Kawika Gonzales

Lokahi: The Ukelele Collective  
Oceanit

Pearl Harbor Aviation Museum

Pacific Fleet Submarine Museum

Piper

STEMworks Spotlight

University of Hawaii Esports & WoHE

Vanta Development Group, Inc.



# LET'S STAY CONNECTED



@STEMworks

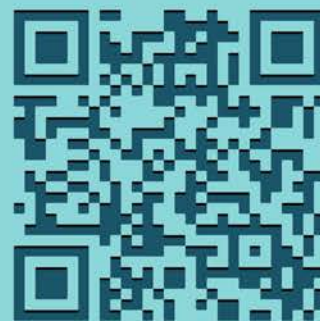


@STEMworksHI  
@medbinc



stemworkshawaii.org  
hawaiistemconference.org  
medb.org

## Student Survey



Share your thoughts about the conference! Please take this survey at the end of the conference on Friday.



maui economic  
DEVELOPMENT BOARD

