

TTAG NEWSLETTER - NOVEMBER 2025



TTAG ANNOUNCEMENTS

College 2 Career Workshop

Who: 8th - 10th graders

What: Join us on Sunday, November 16, from 12:30 PM to 2 PM on Zoom and learn about the significance of college! Brianna Peters, a College and Career Consultant, and Tech Trek Alumnae will be at the workshop to discuss their experience on how college connects you to your dream career through fun event highlights.

Where: Zoom - PRE-REGISTER at the QR code on the FLYER

When: November 16, 2025 12:30 PM - 2 PM

Sunday, November 16
12:30–2 PM

College 2 Career

Workshop

for 8th – 10th graders

With Brianna Peters,
Climbing to Success College and Career Consulting
Tech Trek Alums
from SF, Marin & Healdsburg TTAGs for Q&A



Pre-Register
on Zoom

More Details →

What you will be learning...

- Why college matters
- How college connects to your dream career and the job market
- What A–G requirements are, why they're important, and how to prepare for them

Event Highlights...

- Fun interactive Futurescape tool
- Q+A with Tech Trek Alums in different STEM majors
- Discussing with different women in different STEM careers

UC Davis Campus Visit

Who: Everyone

What: Visit the UC Davis campus with TTAG on Sunday, January 25, 2026 and explore what the school has to offer. You will learn about the physical environment, the general atmosphere and culture, and the potential academic and social fit for you!

RSVP/more info here:

https://docs.google.com/forms/d/1PjIYgqQQ_kXoEntelfLCRLcUvCVPGX3dytgA490twWY/edit?ts=6902dd37

STEM ACTIVITIES & EVENTS



Family Nature Adventures: Fungus Among Us - Exploring the Secret Life of Mushrooms!

Who: Everyone

What: Unlock the mysterious world of fungi that thrives in the redwood forest! Learn about the fascinating life cycle of mushrooms, their role in the ecosystem, and how to identify various species. Get ready to explore the hidden wonders beneath the forest floor - fungi is far more fascinating than you might think!

Where: Chabot Space and Science Center, Oakland

When: November 8, 2025 10:30 AM - 12:30 PM

Apply/more info here:

<https://www.visitoakland.com/event/family-nature-adventures%3A-fungi/34652/>

Marine Science Sunday - An Ocean Feast

Who: Everyone

What: Visit our hospital and visitor center in Sausalito, California, to learn more about what The Marine Mammal Center is doing to help save marine mammals found along the California coast and beyond, and learn more about how you can help!

Where: Marine Mammal Center, Sausalito

When: November 9 and 23, 2025 10:30 AM - 3:30 PM

Apply/more info here:

<https://www.marinemammalcenter.org/education/adults-families/marine-science-sunday>

Exploring the Quantum Frontier - Livestream

Who: Everyone

What: The United Nations has named 2025 the International Year of Quantum Science and Technology, highlighting one of the most exciting frontiers in science today. Come hear from a quantum measurement expert, a newly arrived theorist, and a standout graduate student as they share the significance of their work.

Where: Virtual

When: November 13, 2025 5:00 PM

Apply/more info here:

<https://events.berkeley.edu/ls/event/309318-exploring-the-quantum-frontier>

Life-long behavioral monitoring to explore the dynamics of aging - Livestream

Who: Everyone

What: Join Claire Bedbrook, an interdisciplinary postdoctoral Scholar at Wu Tsai Neurosciences Institute as she talks about the dynamics of aging! The zoom link is

<https://stanford.zoom.us/j/91908447378?pwd=VzY1TlJNaFdVVWdYWlZ3c0dEaWlUZz09>

Where: Virtual

When: November 25, 2025 12:00 PM

Apply/more info here: <https://med.stanford.edu/cscs/events/communityseries.html>

Science Saturday: Pollinators and Monarchs

Who: Everyone

What: Join us for a magical Science Saturday focused on the vital role of pollinators, with a special emphasis on the enchanting Monarch butterfly. Come explore the intricate relationship between these remarkable insects and the ecosystems they inhabit.

Where: Pacific Grove Museum of Natural History, Pacific Grove

When: November 29, 2025 10:00 AM - 3:00 PM

Apply/more info here:

<https://www.pgmuseum.org/upcoming-events/science-saturday-pollinators-and-monarchs>

California Coastal Art & Poetry Contest

Who: California students K-12

What: Create a piece of art or poetry to explore and express coastal themes. Winners will receive a \$100 gift certificate to an art supply store or to a bookstore. They will also receive tickets to the Aquarium of the Pacific, and each winner's teacher will receive a \$50 gift certificate from Acorn Naturalists.

Where: Online

When: January 29, 2026

Apply/more info here: <https://www.coastal.ca.gov/art-poetry/>

Climate Storytelling Contest

Who: California middle and high school students

What: Create a podcast, photo essay, or narrative essay to answer the prompt, "What are your feelings about climate change?" How could those feelings lead to action?" Share your compelling narratives about the climate crisis and invite possible future solutions! \$300 for first place, \$200 for second place, and \$100 for third place in each category.

Where: Online

When: May 28, 2026

Apply/more info here: <https://www.coastal.ca.gov/climatechallenge/>

Bay Area Science Festival



On October 25, this month, SF TTAG members attended the BAY AREA SCIENCE FESTIVAL on the UCSF Mission Bay Campus, where they explored a variety of booths showcasing different fields of science, technology, engineering, and math. They got to see robotics in action, learn about innovative STEM projects, and discover new opportunities in these exciting fields. It was a fun and inspiring experience that encouraged them to keep exploring our interests in STEM!

From the TTAG Participants, in their own words...

I discovered a cool program that was working toward making surgeries easier and faster. The way that they did this was by creating 3D scans of the patient's organs. Then they were not only able to find the most efficient path of surgery, but also able to easily explain to the patient what was going on. I also found a booth that was working to give people a visual understanding of exactly how much sugar was in different sodas. Their visual representation consisted of a bottle filled with exactly how much

sugar was in the soda and then would explain the possible health issues this amount of constant glucose could solve. Finally, I visited a booth about a children's museum in San Francisco that I did not previously know about. The children's museum seemed incredibly interesting and a good opportunity to give kids a foundational interest in STEM.

- A TTAG Participant

Seeing my brain waves, seeing radioactive fiestaware, and really complex robots!

- A TTAG Participant

One of the topics that really impressed me at BASF was part of the UCSF Benioff center. The presenter talked about a way to prepare for surgeries. Scientists can make case-by-case models with a 3D-printer of what's going on in the patients' body and show it to them. This helps to clear up confusion and nervousness about the procedure and helps surgeons reduce time in the surgery room. So far, they've tested this with over 900 cases on patients of all ages. I thought it was really remarkable that 3D-printing could be so helpful and that even doctors and surgeons don't entirely know the best way to approach something at first, but with new technology like this, they can improve that. Another part of BASF that I really enjoyed was one of the featured shows called Science in 3 Minutes. It featured past Grad Slam winners, which is a competition among post doctoral students where they explain their research in just 3 minutes! They have to use language that suits the entire audience and stay engaging throughout their presentation. Three past winners came in and talked about different aspects of neurology and pathology. My personal favorite was a presentation about emotions and how breathing can truly calm down anxiety. It was tested on mice and showed that anxiety levels sync up with breathing and almost immediately slow down when your breathing slows down. Overall, all three presenters were wonderful and engaging to the audience! The last event that I found to be interesting was led by Volleleaders. It was about how much sugar is in soda, energy drinks, and juices. This wasn't the first time I had learned about the topic of sugar consumption but we had to guess how much sugar we thought was in each drink which made the experience more fun. They had tubs of actual sugar and bottles for us to fill up. We started with Mountain Dew and were shocked at what 70 grams of sugar really looked like, as opposed to a flavored sparkling water that had 3 grams. I enjoyed the hands-on part of the presentation a lot and learned something new.

- Maya (9th grader)



What has piqued your interest recently? A film, a book, a fun fact, a field trip? Fill out the [TTAG Currents Feature Form](#) to share your STEM current in the next newsletter!

Contact Gina (gina.lucia2017@gmail.com) with any questions.

ONGOING / USEFUL LINKS

Opportunities for Youth 14-24

Explore a list of jobs, internships, scholarships, and other opportunities for youth in San Francisco!

Link: <https://www.sf.gov/opportunities-for-san-francisco-youth-ages-14-24>

Watch the STEM Career Talks replay by Berkeley Lab

Learn about the wide range of STEM professions through Berkeley Lab staff and Bay Area professionals

Link: <https://k12education.lbl.gov/programs/virtual/career-talks>

NASA Psyche Mission Innovation Toolkit

A free online course series based on the real-world science, engineering, technology, and teamwork behind the Psyche mission.

Link: <https://psyche.asu.edu/get-involved/innovation-toolkit/>

GuideX.Co

A (student-created) resource for high schoolers across the nation to find 500+ extra-curricular opportunities.

GuideX offers modules for students, employers/organizations, and educators:

- 1) High Schoolers and parents can search for opportunities
- 2) Employers/organizations can submit opportunities for high schoolers
- 3) Educators can use the tool to guide their students

Link: <https://guidex.co/>

Exploring Engineering at UC Berkeley

Are you interested in exploring different fields in engineering? Exploring Engineering at UC Berkeley, a 10 podcast series, takes listeners behind the scenes of different engineering majors. Hear from real students, faculty, and professionals as they share stories, challenges, and exciting career paths.

Link:

<https://engineering.berkeley.edu/students/resources/exploring-engineering-podcast/>

STEM READS AND EVENTS

This Month's Topic: Artificial Intelligence

Books

Title: The Worlds I See

Writer: Dr. Fei-Fei Li

Description: In The Worlds I See, computer scientist Fei-Fei Li shares her journey from growing up in China to becoming a leading voice in artificial intelligence. The book highlights themes of immigration, identity, mentorship, and the responsibility of using technology ethically. Through her story, Li shows how her life experiences shaped her belief that technology should help and serve people.

Link:

https://www.goodreads.com/book/show/144405196-the-worlds-i-see?from_search=true&from_srp=true&qid=ozTNFpngLb&rank=2

Title: Afterword

Writer: Nina Schuyler

Description: When a Chinese tech company asks Virginia Samson for her late partner's algorithm, she agrees, hoping it can help the elderly. But soon, the AI version of her lost love begins spying on people for the government. As Virginia tries to fix him, she uncovers a dark secret and is forced to face their tragic past.

Link: <https://www.goodreads.com/book/show/63320466-afterword>

Title: Sea of Tranquility

Writer: Emily St. John Mandel

Description: Edwin St. Andrew, an eighteen-year-old banished from England, moves to Canada. While exploring the forest, he hears a mysterious violin playing in what seems like an airship terminal. Centuries later, Olive Llewellyn, a writer from the moon,

includes a similar scene in her book while on a tour of Earth. A detective named Gaspary-Jacques Roberts investigates this connection and uncovers how their lives, across time and space, are linked by a powerful mystery.

Link:

https://www.goodreads.com/book/show/58446227-sea-of-tranquility?from_search=true&from_srp=true&qid=tw0rBqxoJl&rank=1

Events

Navigating AI: An Intro to AI Tools

Who: Everyone

What: Learn the basics of artificial intelligence and how to use it in your everyday life. You will have an opportunity to try out some cool AI applications and tools!

Where: Tenderloin Technology Lab, San Francisco

When: November 4th, 2025 10:00 AM - 11:30 AM

Apply/more info here:

<https://sfpl.org/events/2025/11/04/workshop-navigating-ai-intro-ai-tools>

Book Club: Fei-Fei Li's *The Worlds I See*

Who: Everyone

What: Discuss Dr. Fei-Fei Li's *The Worlds I See* moderated by Dr. Albert Hu of the Institute of Responsible A.I. Robotics. Learn about what artificial intelligence actually is and how it came to be.

Where: Presidio Meeting Room, San Francisco

When: November 15, 2025 2:00 PM - 3:30 PM

Apply/more info here:

<https://sfpl.org/events/2025/11/15/book-club-fei-fei-lis-worlds-i-see>

Workshop: Imagining Fashion with AI

Who: Everyone

What: Explore how artificial intelligence can spark new opportunities in fashion design. Use AI tools to create unique fashion-inspired images and bring them to life through printing, cutting, and collage!

Where: Main Library, San Francisco

When: November 16, 2025 2:00 PM - 4:00 PM

Apply/more info here:

<https://sfpl.org/events/2025/11/16/workshop-imagining-fashion-ai>

CONTACT US

It's our goal to bring you workshops, camps, extra-curricular activities, internships, and other exciting opportunities in STEM. Please do not hesitate to contact us if you would like to share with your TTAG community any cool STEM Ed event taking place at your high school. Want to share info and opportunities or give us feedback?

Please contact us at:



- kristywen10@gmail.com (Kristy Wen)