

VOLUME X // OCTOBER 2021

happy halloween!

THE 28 PERCENT

Women make up only 28% of the STEM workforce.
This newsletter aims to change that.

taken by Morgan Gaskell, 10th grade



01 - FRONT COVER & ART
02 - EVENTS CALENDAR
**03 - PROGRAMS &
SCHOLARSHIPS**

04 - COOL WOMEN
08 - WRITTEN BY YOU
10 - CREDITS & CONTACT



13

sign up!

wednesday october 13 @ 8:30am -
friday october 15 @ 4pm

Women in Tech Festival

Silicon Valley Forum's annual Women in Tech Festival celebrates women in STEM, business, and leadership who work to inspire, engage, and empower other women. The Women in Tech Festival invites ALL women (as well as anyone who supports the advancement of women and believes in the importance of diversity) to join together for three full days virtually and in-person of inspiring talks, keynotes, startup pitches, thought-provoking discussions, educational workshops, career mentorship and networking.

Tickets are Free - \$100 based on need and ticket type.

WHAT'S THE SCHEDULE?

Wednesday, October 13 | 8:30 A.M. – 3:30 P.M. (Virtual!)

Thursday, October 14 | 9:00 A.M. – 4:30 P.M. (Virtual!)

Friday, October 15 | 9:00 A.M. – 4:00 P.M. (Virtual!)



20

sign up!

wednesday october 20 @ 3:30 - 4:30PM ***Empowering Women in STEM / Virtual Panel***

Interested in learning how women are conquering the tech industry? Join us for a virtual panel, hosted by San Diego State's Global Campus Digital Bootcamps, as we speak with Talia Fayaz, Erika Tapia and Noelle Silver to answer your questions on how to successfully navigate in a male dominated field. We'll also learn about their journeys into the tech industry, what inspired them, how they got there, and why tech needs more women. This event is free and no experience is required.

Topics include:

- Industry Trends
- Networking Like a Boss
- The future of a diverse tech industry

Women in STEM Mentorship Program



artwork by Alissa Santana, 10th Grade

An excerpt from
<https://www.wismp.org/>

It's not a pipeline problem.

In the United States, more women than men are graduating college. Each year, a greater percentage of women graduate with degrees in technical fields, including in the San Francisco Bay Area. But technology companies in this area remain heavily skewed: most engineering teams have less than 20% women. While there are many contributing factors, we've identified the university-to-industry transition as a critical part of the pipeline where improvement is possible.

For eight years, they have connected women university students to practicing industry mentors.

The program is designed to provide mentorship and support during the critical transition from school to work. We have four goals:

- Expand students understanding of the breadth of careers available to them in their fields of study (or adjacent areas)
- Create meaningful relationships with a practicing technical woman to share knowledge and experience
- Enable students to leverage the professional networks of their mentors
- Create a community of like-minded women

This program runs during the academic year, from September to June, partnering with these institutions, and virtually with students around the world.

Learn more [here](#).

an interview with Lauren Newsom

get out there and make your own path

written by Gianna Gullon, 9th Grade

I was lucky to catch up with Lauren,

a young woman from Los Angeles who went to public schools and just started as a program manager at Facebook. We spoke via Zoom, of course, her from San Francisco and me in Altadena. I wanted to find out what led her to a field in STEM, whether she was ever the only woman in her class, what advice she has for other women, and what she did to find success in a field dominated by men. To start with, some background info: She grew up in Inglewood and graduated from the University of California at Irvine (UCI), just this year. She earned a Bachelor of Science degree and majored in Business and Computer Science. After college she became a program manager at Facebook. I got to learn about Lauryn's experience in the STEM field and what the future might look like for women in STEM.

What first sparked your interest in stem?

"In 2015-2016, when I was a Sophomore in high school, I joined a summer program called Girls who Code. There, I talked to people in the industry, and got experience using programming languages, like Python. I was exposed to the possibilities in the industry for women in computer science."

Girls Who Code offers a Summer Immersion program that offers computer science skills they need to make an impact in their community while preparing for a career in tech. Participants will get exposure to tech jobs, meet women in tech careers, and join a supportive sisterhood of girls in tech. Python is an interpreted, object-oriented, high-level programming language with dynamic semantics.

What High School Did You Go To?

"I grew up in Inglewood and went to Da Vinci Design in El Segundo, California."

Da Vinci Design is a 9-12 district -charter school partnership started in 2009 intended to provide project based learning for students. El Segundo is a City about 2 miles away from Los Angeles International Airport.

an interview with Lauren Newsom *(continued)*

What is it like working in a field dominated by men?

“I personally feel that I have had a very lucky experience working in a male dominated field. The majority of my team at Facebook is made up of women, including my manager.”

Lauryn was also able to make connections with the women she met in school as they had the same experience she did.

What would you say to your younger self if you knew what you know?

“I would tell my younger self not to worry. It is a tough field and it is time consuming. You really have to take things day by day. I would also tell my younger self that failure is not failure. What I mean by that is that making mistakes is not failure, it is something that is necessary to help you learn and grow.”



What advice would you give to future women in STEM?

1. *Get out there and don't be shy.*
2. *Make your own path and don't get discouraged from standing up on your own*
3. *Even when you are making your own path and standing up on your own, learn how to ask for help from your peers and your teachers*
4. *You don't have to know everything just because you're the only woman in the room*

It was great to see what the path ahead could look like for a beginner in computer science, like me. Her balanced approach to getting out there, standing up on your own, “failing,” and asking for help when you need it provides a great roadmap for women in STEM in the future.

06// A COOL WOMAN

Mary Shelley

written by Madeleine Lees, 10th Grade

Mary Shelley is most known for inventing the science fiction genre with her novel *Frankenstein*. Although her impact can be easily seen today, her own life is not as well known.

She was born in 1797, London, England. Her mother, Mary Wollstonecraft, was a feminist and she died shortly after giving birth to Shelley. She also wrote works of her own. Her father was a political philosopher and novelist. As a child, Shelley and her half sister were raised by their father until he remarried. Her stepmother did not let her go to boarding school, so Mary's education came largely from her father's extensive library and visits by his educated friends.



artwork by Ruby Chew, 10th Grade

Mary Shelley *(continued)*

In 1812, Shelley met the poet Percy Shelley, who was married. In 1814, they fell in love. Learning of the affair, her father threw twenty-year-old Percy out of the house, and seventeen-year-old Shelley was torn between the two. Her love for the poet won out. They ran away to France later that same year. However, because Percy already had a wife, the two could not marry.

The two traveled throughout Europe and returned to England in the fall. Shelley wove her experiences into a travel memoir, *History of Six Weeks' Tour*, published in 1817. Percy had come from a wealthy family, but hearing of his son's elopement, his father cut him off. As a result, the couple suffered many years of financial hardship. The first of many personal tragedies then began. In 1816, Shelley's half sister Fanny and Percy's wife both died within weeks of each other. The couple's first child was born prematurely and lived only 12 days.

In the summer of 1816, the Shelleys traveled to Switzerland. Trapped inside by rain, her friend group decided to make up their own ghost stories. Shelley finally got the idea for what would become her masterpiece, *Frankenstein*. It is the story of a young doctor named Frankenstein who builds a human monster. The monster, shunned by every human contact, turns to revenge on Frankenstein. Although it has been simplified and retold countless times, Shelley's tale is one of great depth, an exploration of the nature of life and love. It was published at the beginning of 1818. The novel was alternately praised for its creativity and rejected for its gruesomeness.

After the premature passing of more children and the death of Percy in 1822, continued financial hardships with some success, she was still able to indulge her passions of writing and traveling. Shelley's final work was just that; entitled: *Rambles in Germany and Italy*. Shelley lived with her son and daughter-in-law until she died from a brain tumor on February 1, 1851.

Like many great artists, she was ahead of her time. Out of the typical Halloween monsters that come to mind, *Frankenstein's* is the only one to come from a single book and not inspired by folklore. Maybe the next time you see a green zombie with bolts in their neck, you'll think about the woman behind his creation, Mary Shelley.

Happy Halloween!

different perspectives on history

written by Mallika Sheshadri, 9th Grade

Throughout history, those who stand out seem to be the ones who are above the rest of us. Be it physical strength or mental capability, the reason they are still revered today is that they made some sort of impact on those around them that the rest of us cannot fathom as “normal”.

But some of the most famous scientists, musicians, and artists suffered some sort of mental illness in their life. Many of them struggled and even *died* because no one realized that they needed help.

You’ve probably heard about the popular Christmas ballet; The Nutcracker. Written in the 19th century by the famous composer Pyotr Ilyich Tchaikovsky, the Nutcracker has been performed and adapted countless times to this day and people wonder at Tchaikovsky’s genius in creating such a wonderful creation, as well as all of the other wonderful pieces he has written. What you may not know is that in his lifetime, Tchaikovsky suffered from severe mental health problems that eventually resulted in him taking his own life at the age of fifty-three.

Another example is Vincent Van-Gogh, an artist of critical acclaim whose work is valued at millions of dollars. Van-Gogh also took his own life by shooting himself and died two days later. Or maybe you’ve heard of Robert Schumann, a famous pianist who used unsafe medical practices to make his fingers more flexible. This resulted in his hands becoming paralyzed and he couldn’t play piano anymore. Schumann died in a lunatic asylum aged 46. History is filled with tons of people like this, and yet no one ever thought to help them. It is so easy for us humans to become blinded by jealousy that we cannot see when someone needs help. Perhaps if Tchaikovsky had a therapist, he would’ve lived longer.

I wish I could come to a conclusion here, but since this concept is entirely theoretical I genuinely can’t say for sure that this is applicable to everyone in the world. All that I ask is that you view these types of people not in jealousy, but with a little bit of sympathy because you don’t know what they could be going through.

artwork by Alissa Santana, 10th Grade



the science of scary music

written by Emma Hungerford, 10th Grade

Have you ever wondered why certain music gives you the chills? Take the *Jaws* theme for example. According to TIME magazine, the “irregular minor chords trigger the same response a mama marmot feels when her babies are threatened”. There is shown to be some sort of biological instinct that causes strange, abrupt sounds and minor chords to make us feel uneasy.



While studying marmots in Colorado, scientist Daniel Blumstein observed that the screams that the baby marmots let out when they were being caught by researchers, is called nonlinear chaotic noise. In 2010 Blumstein found that horror scores use sounds that classify as nonlinear chaotic noise very often, one example being *The Shining*, who’s soundtrack reportedly actually used recorded screams of animals. He believes sounds trigger an instinctive response that makes it feel like our young are threatened, making us afraid.

Along with composer Peter Kaye and professor Greg Bryant, Blumstein conducted a study where Kaye created music clips, some being created to be “emotionally neutral”, and others using nonlinear sounds. In the first part of the study, people were asked to listen to the music and report the emotions they felt.

In the second part, people listened to the music while watching videos “of activities like drinking coffee or reading a book”. Participants showed that the unpleasant music with nonlinear noise caused uneasiness & fear, but much less when paired with the videos.

So, seeing something scary is more effective at getting a reaction than listening to something, but next time you watch a scary movie and hear that spine chilling score, remember that it’s your instinct to feel scared!

the girls that made this newsletter possible:

Emma, 10th Grade
Violet, 10th Grade
Jaidyn, 10th Grade
Celeste, 10th Grade
Madeleine, 10th Grade
Morgan, 10th Grade
Ruby, 10th Grade
Alissa, 10th Grade
Gianna, 9th Grade
Maxine, 9th Grade
Mallika, 9th Grade
Ms.Orret, Advisor

Check out our website:

[https://msorret.wixsite.com/
onlineclassroom/women-in-stem-newsletter](https://msorret.wixsite.com/onlineclassroom/women-in-stem-newsletter)

***have a question? want to get involved?
want to be featured on a newsletter?***

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