The Peak to Peak Alumni Magazine

Piqued

/'pēkt/(verb) to excite interest or curiosity, to arouse an emotion or provoke to action



STEMpowered

Science. Technology. Engineering. Mathematics. These are the four disciplines shortened to the simplicity of the acronym "STEM," and ubiquitous in discussions of underrepresentation and gender inequity in related careers. Peak to Peak celebrates our alumni women and LGBTQ+ trailblazers in the STEM fields and strives to develop and support our current students in the pursuit of their STEM-focused passions. Volume 5: Issue 1 November 2021

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- A Day in the Life of Three STEM-Focused Alumni
- 2021-22 Peak Annual Fund



Message from Ms. Reeser Executive Director of Education



Dear Peak to Peak alumni,

It's probably no surprise to hear that the 2020-21 school year was by far the most challenging one we have ever weathered as a school – the uncertainty, disruptions, and stress associated with the pandemic certainly took a toll on our students, staff and parent/guardian community. We already knew that students learn best in a face-to-face setting of safety and community, but our experience of distance learning during the pandemic drove this point home in a profound way. As a result, we started the 2021-22 school year with a clear focus on our highest priority – to return to full-time, in-person instruction for all students, and to do so as safely as possible.

To accomplish this, we adopted philosophical and tactical approaches <u>supported by science</u> to operate a school in a pandemic. These included <u>layered mitigation strategies</u> that have been proven to reduce the spread of the virus in a school setting, such as encouraging vaccinations, active and passive screening and frequent testing, social distancing to the extent possible with seating charts to aid in contact tracing, increased ventilation and air purification, hand and respiratory hygiene, increased cleaning protocols, and universal mask-wearing. We were supported in these approaches by BVSD Health Services as well as Boulder County Public Health, and this support has been pivotal to our ability to focus our energy productively. We are now at a point in the school year that we can confidently say that these measures are working as intended, and, as a result, we have so far been able to keep school open and operating relatively smoothly.

As we are settling into this new school year that feels much more "normal," students and staff are thrilled to be back together. The sense of community amongst all our Pumas is stronger than ever! We are so proud of our students, staff and families who stuck together to weather



the pandemic storms of the past 20 months. Although the virus is still with us and we still have occasional disruptions, we have learned how to co-exist with it. As a result, the pandemic clouds are clearing and we can see bright skies ahead. With a hearty nod to the power of science, please enjoy this STEM-focused edition of **Piqued** to see how our students and alumni are contributing to these critically important fields.

Kind regards,

Keery Reeden

On the cover: Students take a moment in the hallway to catch up before heading off to class

Above from left to right: 1) this fall, teachers are using outdoor spaces around campus for classroom instruction thanks to upgrades in the campus Wi-Fi coverage, 2) the warm weather throughout September and October made it possible to take music classes outside, as well, and 3) before the wind carried the leaves away, the playground was transformed into a splash of autumn color for all to enjoy.



News & Noteworthy

TEAM ADVANCES IN TEXAS INSTRUMENTS' 2021 CODES CONTEST

Shriya Biddala (11th grade) and Yashaswi Bista (11th grade) advanced to the third round in the <u>2021 TI Codes Contest</u>, in which only 15 teams were selected. Together, they won a TI-84 Plus CE graphing calculator, TI-Innovator Hub, TI-Innovator Accessory Packs, and a \$50 Visa gift card to create a prototype of a bionic knee brace. This knee brace will help people going through the knee recovery process and those paralyzed walk.

ELEMENTARY TECHNOLOGY TEACHER IN NATIONAL CONVERSATION

Kathleen Weil (Elementary Technology Teacher) was recently interviewed on the topic of <u>Digital</u> <u>Citizenship for a BrainPop blog</u>.

From the blog:

- "I believe it's important to help
- students identify that their
- character plays an important
- role when working online," says
 - Kathleen Weil, whose school maintains a strong focus on character education. "Character

traits from our school program that I incorporate into my digital citizenship lessons include respect, responsibility, kindness, integrity, self-control, cooperation, and perseverance."

Through her work on this topic, Ms. Weil was contacted by the Ronald Reagan Institute who have invited her to participate in a panel discussion in their series, <u>"The State Of Civics: Colorado"</u> virtual conversation to highlight the exemplary civic education initiatives of Colorado. Among the panelists was Colorado's Commissioner of Education.

2021 EDUCATOR INNOVATION

AWARD Ms. Kristie Letter, high school teacher, was selected as a 2021 Educator Innovation Award Winner by the <u>Bow Seat</u> <u>Ocean Awareness Program</u>. This award recognizes teachers who have empowered their students to become creative stewards of our planet by incorporating the Ocean Awareness Contest into their curriculum. The program invites youth to learn about and explore the connections between human activities and the health of our ocean through visual and performing arts, creative writing, film, and multimedia.

"Our 2021 Ocean Awareness Contest theme, Water Rising, focused not just on the ocean, but on water in its many forms. By using the Contest as a teaching tool, our Educator Innovation Award winners taught their students about water's connection to climate change, health, justice, and culture, and encouraged them to tell the stories that need to be told to protect this precious element."

WORLD SERIES Six Peak

- to Peak tenth-grade students
- are in the international finals of
- the World Series of Innovation.
- Chosen by judges as crafting the
- best submissions, they are creating
- videos showcasing their ideas to
- help solve the U.N.'s sustainability
- goals. Shreya Senthilkumar
- is creating clean energy, J.P.
- Kerrane is pursuing equity in our
- justice system, Ziba Ahamad and
- Vidya Balachander are devising strategies for Covid recovery,
- Strategies for Covid recovery,
- Xana Scriber is upcycling textiles,
- and Kayla Kerrane is helping the
- unbanked find financial security.

LGBTQ+ IN THE COMMUNITY

The OASIS GSA Network for LGBTQ+ youth and allies in the St. Vrain Valley and Boulder Valley School Districts highlights adults in the community who represent a variety of LGBTQ+ and intersecting identities and are engaged in the community in different ways. In this month's newsletter, Peak to Peak Spanish teacher, Joseph Barbour ("Señor B") received their first community nomination.

From the newsletter:

"This month, we received our first LGBTQ+ in the Community nomination: Joseph Barbour (he/him/his)! I was excited to hear about the positive impact that Joseph has had, and for the chance to get to know him a little bit and share that with you!

From the young person who nominated Joseph: "His willingness to learn from us as well as teach us about his experience impacted my life in ways I cannot begin to describe, and I attribute a lot of my development into the queer adult I now am to him... Joseph was among the first happy and successful LGBTO+ adults I was aware of, and he helped me to know that was a future I could have. He is the LGBTO+ adult I wish I'd had in my life sooner, and whom I will appreciate forever."

What do you do, and what is your favorite thing about it?

I'm a high school Spanish teacher and honestly can't imagine a better job. I'm a total language nerd who loves sharing that passion with others.

What do you love about being part of the LGBTO+ community? I love that even though we're such a diverse community, we are still family and rally to help each other when in need. Now that I'm a teacher, I also love the butterflies I get when I meet another out and proud educator.

What are your top self-care strategies?

I try to set aside some "me time" every day so I get to do something like read a good book or play some Zelda on my Switch. If time is short, any of Trixie and Katya's videos on YouTube will usually brighten up my day!"

MIDDLE SCHOOL HOUSE SYSTEM Peak

to Peak's middle school rolled out a new "house system" this • . year. Built on the RCA House System, Peak to Peak's program is designed to build community • and a sense of belonging for our students in 6th, 7th, and 8th grade. Using this system, we strive to create an undercarriage for character building, to encourage positive interactions and empathy, to offer leadership and service opportunities, and, of course, to amplify school spirit. Students showed enthusiasm and excitement during the initial assembly to introduce the program and sort the houses. •

YEARBOOK AWARD

- Peak to Peak's yearbook team won
- a Jostens 202 Í National Yearbook
- Program of Excellence award at
- the Bronze Level. The National
- Yearbook Program of Excellence
- recognizes engaging yearbooks
- that reflect a broad representation
- of the student body while helping
- students develop 21st century
- skills such as communication,
- collaboration, and information
- and communication technologies (ICT) literacy.





Alumni Spotlight: Lauren (Cuevas) J

Where are you now, and what are you up to? After graduate school, I moved to San Francisco with my now husband. Originally, we had planned to only be here temporarily until I could figure out my next career steps, but we have been here for four years and just bought a home. Our family includes our cat who moved with us from Colorado, and a dog we adopted from a rescue in Taiwan. We love the city!

In true San Francisco form, I currently work at a biotech start up. I have been with them for 2 ½ years and have been involved in growing the company through funding rounds and creating a profitable arm that has allowed the company to double in size in the time I've been there. I am very fortunate in my current role that it encompasses the skillset I already had and the opportunity to build new skills in areas that I hadn't been exposed to yet. My job description includes business development to help grow the company in a strategic way, operations to support clinical studies and our product lines, and product specialist responsibilities to work with customers across our product portfolio. One of my favorite aspects of my current position is to create a smart medical imaging offering using our proprietary technology to better optimize imaging for monitoring treatment and the disease progression in cancer patients. Prior to my current position I ran clinical trials in patients with advanced metastatic melanoma alongside world class oncologists at UCSF.

Do you think your time at Peak to Peak helped you? Yes, Peak to Peak fostered my ambition which has been invaluable. I was always encouraged by my teachers, by the principal, and by the Dean of Students. I was never told that I couldn't achieve what I wanted to achieve for that semester, or that I should consider a less ambitious schedule of classes. I had adults at Peak to Peak who believed in me and were always there to help if I needed it. For me, this initial support fostered success and gave me confidence to be ambitious in college and afterward.

Did you ever imagine doing this while you were at Peak to

Peak? While I was at Peak to Peak, I didn't have a solidified career path I was pursuing. I would even say that I still don't have a solidified plan, I have a running list of things I would like to achieve but I'm not quite sure the path that I will take to get there. Some advice I try to give when someone asks me about choices in career path is that you don't have to have a definitive answer to the question, "What do you want to do when you grow up?" You are allowed to explore and try different things. Growing up I planned to be a marine biologist which is very different from where I ended up. I am still within the sciences, but not even remotely close to what I had planned.

Were you involved in any clubs or organizations during your time at Peak to Peak that supported your interest in STEM?

I joined a few clubs while I was at Peak to Peak like Mock Trial, and I also played sports while I was there. Peak to Peak had only a few graduating classes before mine in 2007 and they were still growing, which meant the options for clubs at Peak to Peak were limited. Some of the students joined clubs or sports at neighboring high schools. I did have an interest in physiology and medicine and volunteered at Boulder Community Hospital while I was in high school. This was a great opportunity, and I was introduced to multiple aspects of medicine and caregiving.

Now there are so many opportunities for high schoolers to learn about STEM. I really recommend seeking those opportunities out. One thing I wish I knew in high school was that you can create your own opportunities. If there is something that you are interested in and you can find someone doing it, reach out to them. See if you can shadow them or do an informational interview for 15 minutes. Most people are willing to give 15 minutes of their time and they may even offer an internship or introduce you to an organization where you can get hands-on experience. There are lots of summer programs and camps for the sciences, but you can also make your own opportunities and develop your own relationships and personal network that could be more valuable.

What education have you pursued since high school?

Following high school I took a scholarship at Kansas State University where I stayed for a year. For a number of reasons, I decided to transfer to Colorado State University for my sophomore year and beyond. At CSU, I received a dual bachelors in zoology and biology with a concentration in anatomy and physiology and also received a minor in biomedical sciences. Following that I took about a year off and applied to graduate programs in physiology before landing at CU Boulder where I received a master's degree in integrative physiology and completed my research thesis on cardiovascular aging.

Who was your favorite teacher and why? I had so many great teachers at Peak to Peak. Some are still teaching there and positively influencing so many students. The most influential aspect for me was

ohnson Class of 2007

how many amazing female teachers I had that were so accomplished. Many with advanced degrees or published authors, they were incredibly intelligent and so passionate about educating the next generation. They were great role models for me and had many qualities that I admired and could strive to emulate.

Are you still friends with anybody from Peak to Peak? Yes, one of my best friends I met at Peak to Peak. Charlotte Moss and I have been friends for over 15 years, she's such a wonderful person and I was very lucky to meet her so long ago. I still loosely keep in touch with some of the other friends I had in high school through social media and it's really great to see everyone's accomplishments with careers, family, and other achievements.

What's the most influential class you've taken in college? heavily focused on STEM because my dual bachelors and minor were all in the biological sciences. Knowledge from my human physiology, anatomy, and cadaver courses are used daily at my job. Some of those classes were enjoyable and some were challenging, but I also took art classes in college to balance my interests and foster my creative side. I took classes in painting, figure drawing, and sculpture. I still paint now as a hobby, but I found it so valuable in college to make friends outside of the sciences and I had the opportunity to learn in a very different way than my organic chemistry class. My best advice for college is take any class that interests you. Some classes are major specific, and you would have to be enrolled in that major to take the class, but many disciplines offer interesting classes for non-majors. I followed this rule in the sciences too. If there was a class I was interested in I would take it, even if it was not a graduation requirement. Undergraduate education is a unique opportunity to explore and grow as a student and as a person.

What would you like to tell your fellow alumni? It's very inspiring to know that we all have the shared background of Peak to Peak and each person has taken the skills and values they learned to create their own path. Focusing on fellow female alumni in STEM (and those women who plan to pursue a form of science for a career), I would say that it doesn't matter if it's medical science or computer science, it is already an accomplishment to be a woman in this space. Women are a growing force and there has been more support amongst women of differing career levels than ever before. Our generation, more than any before, has required the ability to have a family and pursue a fulfilling career, and employers, especially in biotech and pharma, are more amenable to that ideology because they realize that having female talent as part of your team is irreplaceable. Always remember, as RBG said, that women belong in all places where decisions are being made, you are valuable, and your voice should be heard.







Boomerang Pumas:

Brenna Costello, Class of 2015

What brought you back to Peak to Peak, how long have you been here and what are you doing for the school?

I came back to Peak to Peak because my close friend from high school, Corinne Lythgoe (one of the other high school paraprofessionals), had recommended the job after doing it for a semester last year. I'm working in learning services as a high school paraprofessional, and I've been here since mid-September.

Then...



How is the school different from when you were a student?

When I was in high school there hadn't been any of the new renovations done, so the school building itself is different. I feel as though the school climate in regards to the students being highly competitive with each other and stressed out has improved. The teachers and other staff members have really made an immense effort to help students who may be struggling after almost two years of online learning during the pandemic, and it really brings me joy to see from a staff perspective the care and training that goes into every aspect of the students' learning.

What advantage(s) or disadvantage(s) have you found when working at the same school you graduated from?

Some of the advantages of coming back to Peak to Peak after going to school here are the already formed relationships I have with the teachers and staff, being familiar with how the school and classes work, and the expectations teachers have for the students. I have an easier time relating to the current students as I had gone through a similar curriculum.

Tell us about your recent successes/adventures?

I graduated from Eckerd College in 2019 with a degree in biology, and soon after I got a job with the Cornell Lab of Ornithology working out of the Bunya Mountains in Queensland, Australia. I had previously studied abroad at James Cook University in Townsville, and fell in love with the culture, people and wildlife. After the pandemic began and I had to leave Australia, I started working at Reverb which is an environmental music non-profit that works with bands and musicians to make their tours more environmentally sustainable. I've been volunteering with them since 2017. I'm happy to be officially working with them now. I also work as a production intern for Z2 Entertainment at events and concerts in Boulder.

What message would you like to leave for our Alumni?

I'm thankful for my time as a student at Peak to Peak, for the friendships I made, the education I received, and I'm glad to be back helping students succeed and thrive in their high school experiences.

ALSO NEW TO OUR STAFF:

- Brianna Lund, Substitute Teacher, Class of 2016
- Sarah Martinez, Substitute Teacher, Class of 2015
- Ilse Meiler, High School French Teacher, Class of 2016
- Emma Zurek, Food Services Team, Class of 2021

Alumni On Staff

Corinne Lythgoe, Class of 2015

What brought you back to Peak to Peak, how long have you been here and what are you doing for the school?

I joined Peak to Peak staff in April 2021. During a period of unemployment, toward the beginning of 2021, I really thought about how I wanted to be spending my time. One of my majors in college was sociology as I really care about people and working through a lens of equity. I decided that I may really enjoy teaching and applied to be a high school paraprofessional educator to get a feel for what it is like on the other side of the classroom. I am still currently a paraprofessional educator and enjoy working one-on-one with students in a variety of classrooms.

Tell us about your recent successes/adventures?

I graduated from Pacific Lutheran University in 2019 and double majored in Environmental Studies and Sociology. During my time in college, the highlight was studying Political Sociology, Social Justice through a lens of History and Economics, and Food Justice at the University of Oxford in Oxford, England for six months. After graduating college, I joined the Colorado Episcopal Service Corps and lived in Denver. I worked at Metro Caring, a food resource center, and addressed hunger at its root through the Diabetes Self-Management Classes, cooking classes, assisting with ID/Drivers License procurement, and as a supervisor to the customer service and customer intake process of shopping through the market.

How is the school different from when you were a student?

I've really noticed an emphasis on social and emotional support. This pandemic time has been really hard! We have had to learn and unlearn our metacognitive skills, and countless ways of doing daily tasks; both in the classroom and in the world. What I really love about Peak to Peak is that people care so deeply about our community and although I felt this as a student when I was in high school here, I really believe that teachers are implementing much more in the classroom (including surveys and personal check-ins) in order to support our students' emotional needs. Seeing each other as holistic people has helped my role in the classroom, both for understanding my students as well as my students understanding me! One of the "rules" in an English class I am in is: "people have their off days, and it is important to respect that." We are all doing the best that we can under our circumstances and it is important to give each other grace.



What advantage(s) or disadvantage(s) have you found when working at the same school you graduated from?

It is very weird to call staff by their first names! I don't feel old enough to work with teachers who used to be my teachers in high school; however, it is really fun to reignite my relationships with them. From an educational side, it is cool to see what hasn't changed, such as learning the linking verb song or writing personal legends. What message would you like to leave for our Alumni? Being back at Peak to Peak, I've been reflecting on my time here when I was a student. I am grateful for the opportunity to attend high school here and encourage you to reflect on your time! Whether it was good or bad we are still a community.

Left: Corinne Lythgoe and Brenna Costello dressed for the 2015 Prom. Above: Corinne Lythgoe and Brenna Costello on a hike together in 2021.

Female Students Leading

FEMALES FOR FINANCE



Established in the 2021-22 school year, the mission of the Females for Finance Club is to bridge the racial and gender gap in the finance field empowering young students to get a basic understanding of financial literacy, investments, and the necessary skills to be financially independent. The club founders, Sena Kavi (12th grade), Leila Allen (11th grade), Anjana Radha (10th grade), and Ava Sommer (10th grade), have recruited about twenty-five members to the club. With help from their sponsoring staff member, Ms. Tarbutton (High School Math Teacher), they are planning a stock market simulation project using Market Watch which will allow the members to interact with the market in real-time. Additionally, they plan on scheduling quest speakers to talk to the club members about job opportunities and the field in general. If you are interested in being a guest speaker or visiting with club members, please reach out to the club leaders at p2pfemalesforfinance@qmail.com.

Spring 2021 National Center for Women & Information Technology (NCWIT) Award Winners

- Allison Beasley (Class of 2021): Affiliate Honorable Mention
- Shriya Biddala (11th grade): Affiliate Honorable Mention
- Quinn Burns (10th grade): Affiliate Winner
- Nicole Kerschner (12th grade): Affiliate Winner
- Aveena Rawal (12th grade): Affiliate Winner

- Julietta Rozin (Class of 2021): National Honorable Mention and Affiliate Winner
- Cailyn Smith (Class of 2021): Affiliate Winner
- Sophia Steven (12th grade): Affiliate Winner
- Lauren Wagner (12th grade): Affiliate Winner

SOCIETY OF WOMEN ENGINEERS

The Society of Women Engineers (SWE) is a national program that seeks to empower women within the field of engineering and provide a place for those interested in engineering to connect. The Peak to Peak branch of SWE is primarily focused on engaging high school students in science and engineering projects and supporting women in science and engineering; however, the club is gender inclusive and everyone is invited and encouraged to join. SWE hosts meetings twice a month where students embark on engineering projects such as gingerbread house circuitry, engineering kits (including Arduino Unos and Wacom tablets), and cookie experiments. The club also organizes school events where local engineers and college SWE members attend as guest speakers and share their experiences and engineering feats. The club is led by Bethany Bass (12th grade; <u>bcbass01@bvsd.org</u>), Sophia Du (12th grade; <u>ssdu01@bvsd.org</u>), and Sophie Steven (12th grade; <u>smsteven01@bvsd.org</u>). Please reach out to them or to club sponsor Mr. Hankla (High School Physics Teacher) if you would like to be a quest speaker.



Peak to Peak STEM Fields

"We live on a razor's edge in middle school science where we are trying to curate a passion and interest for understanding the physical world, while at the same time building basic skills and base knowledge about science topics that will be needed in future classes. Any time a student comes to our classes with a natural curiosity related to our content it definitely makes their learning smoother, but I hope to change the minds of those who claim to be "bad" at science, or claim to not like it as one of my primary goals. The Science Fair provides a structure to apply students' curiosities, and a way to compete at something that they find a natural talent within."

-Brandon Nelson, Middle School Science Teacher

SPACE CLUB

Established in the 2020-21 school year, the Space Club founders are Amanda Skinner (11th grade), Vasilisa Malenkiy (11th grade), and Anjana Radha (10th grade), The purpose of Space Club is to explore the scientific aspect of space (astronomy, astrophysics, astrochemistry, solar science, planetary geology, etc.); to conduct space-related activities and experiments to spark interest in students (rocket building, data analysis, how to determine chemical structures of stars, etc.); and to present career paths; and provide career counseling for those interested in space through guest speakers and professionals in the field. Ultimately this club exists so that students have the opportunity to explore and be curious about space in a safe and encouraging environment.

The overarching goal involves fueling the passion for space and science in our community. Club leaders make it a priority to value the opinions and wishes of club members by sending out monthly surveys. Some of our other goals include becoming politically engaged in Colorado with projects like the Dark Skies Initiative, working to reduce light pollution which ultimately impacts the quality of astronomy research. The group also hopes to schedule a field trip to Hawaii and the observatories atop Mauna Kea or to Texas and the NASA Johnson Space Center. The club also seeks opportunities to work with college professors and industry professionals to help students land internships or research assistant positions.

Space Club revolves around a monthly theme (like astronomy, solar science, astrophysics, black holes, etc.) and the activities center around that theme. For example, in September our monthly theme was

astrochemistry so the members conducted a flame test with different metal salts and used spectroscopes to analyze the emission spectra of different atoms. This activity simulated a process astrochemists use to analyze the emission spectra of atoms to predict the composition of distant stars and galaxies. For October, the theme is rocketry and the club will host a rocket launch tournament where members will try to launch air rockets into laundry baskets and cornhole boards for fun prizes like alien socks and water bottle stickers.

The club currently has over sixty members and is sponsored by Mr. Knox (Middle School Science Teacher). If you are interested in being a guest speaker or visiting with club members, please reach out to the club leaders at <u>vkmalenkiy01@bvsd.org</u>, <u>acskinner01@bvsd.org</u>, or <u>aradha01@bvsd.org</u>.





A Day in the Life

MADISON LIN Class of 2021

Boettcher Scholar studying Aerospace, Computer, and Electrical Engineering at University of Colorado Boulder

6:25 am: Wake up, brush teeth, and get dressed, trying my best not to wake my roommate

6:45 am: Pack my swim gear from the day before, leave my dorm, and bike to the Rec

7:00 am: Swim practice

I definitely have to stay active to keep my day-to-day life balanced. The swim team is a great way to get up and moving and is an excellent way to start the day. It's always a great time, and the team environment is extremely inclusive and nice to be around. We just went on a trip to Utah for a meet, and we all had a blast!

9:15 am: Breakfast with the swim team

10:00 am: Bike back to the dorms

10:10 am: Work on coding homework for my Aerospace Computing and Engineering Applications class.

The first half of this semester was on C++ but now we've moved on to using MATLAB. We've done a bunch of little coding projects with each of these, and it's a lot of fun learning some new languages to work with.

10:45 am: Read for my Engineering Honors class: Critical Encounters.

Currently, we are reading Descartes - Meditations on First Philosophy. This class is a philosophy class for the Engineering Honors Program. We read and watch a whole bunch of texts/movies/shows from picture books to Star Trek to Plato, then have some lengthy discussions about what it means in class. This might be one of my favorite classes I have this semester.

11:30 am: Applied Math: Calculus 3 for Engineers

Calc 3 is probably the hardest course I have this semester, but Mr. Lehr's classes have prepared me very well. Most of the concepts are just review for me at this point, although their applications are quite different.

12:30 pm: Lunch

1:50 pm: Electrical Engineering Projects Course: Introduction to Analog and Digital Electronics

This class is an entirely hands-on type of projects class. From day one we were working on Arduino labs, soldering circuit boards, and





completing workshops on laser cutting, machine shop basics, printed circuit boards, 3D printing, and more. Mr. Hettmansperger and Mr. Hankla's classes definitely came in handy here while we were working with Arduinos and circuit schematics.

Now, we've been split into groups and are working on our own engineering projects with the broad prompt of assistive technology. My group is designing a token economy system to be used in classrooms that consists of an LED board, physical tokens to control it, and a sorting mechanism for the tokens.

4:00 pm: Critical Encounters recitation

I absolutely love all the STEM classes I have, but it is great to have a break from that and have to think in a completely different way for a philosophical discussion. Our recitation group is a group of 4 freshmen currently taking the course and 2 upperclassmen who are also in the engineering honors program. We've had very in-depth discussions about the themes of the texts we read and how they apply to the world as a whole.

5:00 pm: Great Lunar Expedition for Everyone workshop

This week, I've been involved with the GLEE workshop. We've been working on LunaSats and programming its various sensors to be able to collect, send, and receive data once they get sent to the moon. Currently, this is just the beta workshop — the plan is to send LunaSat kits out to 500 total teams around the world for people to design their own missions with.

10:45 pm: Get ready for bed

11:00 pm: Go to bed

What do you remember most about early STEM experiences at

Peak to Peak? Peak to Peak was always great at encouraging STEM engagement for me. I remember doing my first science fair project in 3rd grade, which really just consisted of watching various French fries mold for a few weeks, and being really excited about doing more science in the future. In middle school, going on Salish was such a fun experience, because what could be better than taking scientific data while sailing around the Puget Sound? In high school, there were even more STEM opportunities to choose from, including classes, clubs, and other extracurriculars. Overall, Peak to Peak has always just offered so many different hands-on opportunities to get involved with different areas of STEM, and more are still being developed. This definitely had a big impact on my decision to pursue engineering in college.

What Peak to Peak experiences prepared you most for college? I'd

say that Peak to Peak has prepared me very well to succeed in college. First off, it taught me how to manage difficult classes and be able to study effectively and efficiently. In fact, my classes now seem quite easy in comparison to the classes I took in high school. In addition, my experiences at Peak to Peak showed me how important it is to be able to find and juggle a good balance in life between school, homework, extracurriculars, and having fun. You always have to take time for yourself and make sure that you're enjoying the moment while you're in it.

Describe some of your STEM experiences so far in your career.

My main STEM experiences in college so far have been from my classes. Right now I'm taking a computing class, a math class, and a projects class that each brings together a different aspect of STEM into my schedule. However, I'm also looking to add some more STEM involvements into my schedule outside of class. I've been looking to join the Sounding Rocket Lab, a club on campus that works on highpowered rocketry.

There are also a lot of small STEM events that happen around campus pretty often. The GLEE LunaSat workshop was one of them, but I've also been to a few speaker events at the Fiske Planetarium, spent some evenings at the Sommers-Bausch Observatory, and just worked in the Integrated Teaching and Learning Laboratory on various projects with all of the amazing equipment they have there. The other week, there was a Texas Instruments workshop that I attended where we were all provided kits to work on embedded systems and coding games. There are so many opportunities like this happening all the time, and I plan on going to more of them whenever I can.

What would you change if you could go back to your 9th grade year and do it all over again? If I could go back to my 9th-grade year and do it all over again, the main thing I would change is to not overload my schedule as much as I did the first time around. Yes, there are so many interesting extracurriculars to get involved with at Peak to Peak, but I think it would have been better for me to just pick one or two to really dive deep into than trying to do so many and not be able to go very far with any of them. Other than that, I don't think I would change a thing. The experiences I had at Peak to Peak have shaped who I am today and I definitely would not be where I am now without them.



A Day in the Life

MAKENNA TURNER Class of 2020

Computer Science Major studying at Stanford University

5:00 am: Lightweight rowing practice

I was not a recruited athlete but chose to walk on the team this year for fun.

5:30 am: A van picks me up at my dorm and I run out, yogurt and banana in hand

6:00 am: Rowing practice at the Stanford boathouse

Super cool and sometimes seals will swim by you!

8:45 am: Shower, because I smell like Bay Area channel water

9:00 am: Breakfast

9:45 am: American Sign Language class

The teacher gave me the sign name "sleepy" and I am if I didn't get proper sleep the night before!

11:00 am: Office Hours/Meeting and/or Lunch

12:00 pm: Horseback Riding Lesson

I am also a club sport athlete on the Stanford Equestrian Team.

1:00 pm: Shower, because I smell like horse

1:30 pm: Writing and Rhetoric Class

3:15 pm: Computer Science Theory and Proofs Class

It's recorded so I will watch it later.

4:00 pm: Run/Lift with my team

6:15 pm: Dinner

7:00 pm: Evening meetings (Women in Computer Science Fellowship, PEAK Fellows Meeting, Equestrian Team Meeting, or Alpha Phi Sorority Meeting)

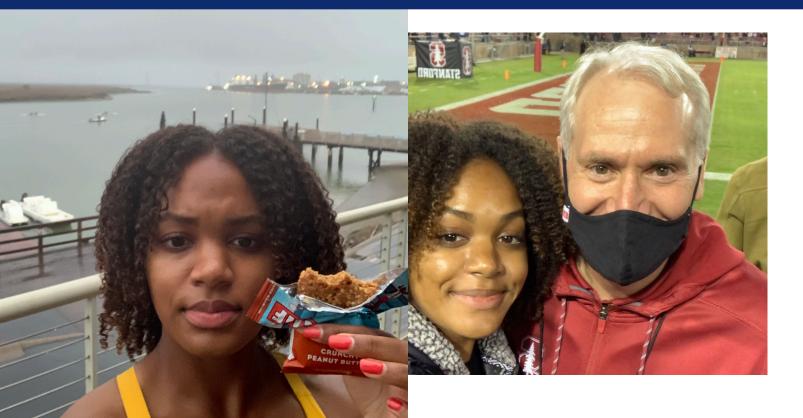
8:00 pm: Work time

11:00pm: Sleep!

Fun Things I do occasionally:

- Four course meals at job recruiting dinners
- Getting to travel for my sports
- Getting flown out for work to an office/headquarters
- Just hang with friends (quite frequently!)
- Explore the food around campus
- Go to the Stanford Symphony Orchestra or a show on- or offcampus

If you knew me in high school, you would be unfazed by my schedule now. It's super busy but I truly enjoy every thing that I do. However, I recognize that at times I don't give myself room to breathe or relax, and I should. This was my first in-person quarter of college and I still have some adjusting to do. I'm actually ahead of schedule on my degree by two quarters so there's no need for me to speed through at the pace I'm going. Next quarter, I hope to take more units which will allow for more flexibility in doing things I enjoy outside of class, while also being realistic with what I have time for.





What do you remember most about early STEM experiences

at Peak to Peak? I came to Peak to Peak when it was still a very young school; the playground in the elementary didn't even exist in full capacity until I was at least in first or second grade. It was the early 2000s, mobile technology was in its infancy and was yet to be integrated into classrooms as it is now. My earliest experience with technology at Peak to Peak was in fourth grade when we used AlphaSmarts, which were primitive computers, to do typing exercises. From then on, technology became more prevalent.

What Peak to Peak experiences prepared you most for college? There are two ways to answer this question: what prepared me most for the college application process versus what prepared me most for college itself. The answer to the first question is primarily the things I did outside of class. Whether that was clubs or other activities, pursuing what I loved to a degree at which I could speak for days about it was an incredible benefit. I don't like the idea that kids should find "spikes" or "hooks" or only pursue a singular thing. Yes, burnout is real, but if you are doing what you love it's a lot harder to stifle your flame.

The answer to the second question would be the ability to keep myself to a strict schedule and study pattern. Though the pandemic upset this pattern incredibly, I went through high school doing most of my work a week before it was due and never on weekends. Allowing myself the time to relax meant I was able to focus better when needed. I also think learning to email teachers and ask questions was an experience that greatly help me going into college, because I learned not to fear asking something stupid.

Describe some of your STEM experiences so far in college. I am currently a Computer Science major (officially declared last week). Due to the pandemic, I have avoided a lot of hands-on engineering classes until now. Next quarter I will hopefully do some electrical engineering courses but Stanford has a plethora of non-class opportunities to work in maker spaces or design labs. This past summer, I worked at Amazon as a Software Engineering Intern and next summer I will be working at the Boston Consulting Group for a slight change-of-pace.

I am currently working under the Chair of the Management Science and Engineering department on research involving workplace diversity and its connection to work from home environments.

I look forward to exploring further what I've learned in the classroom. I want to pursue start-up culture and delve into what I see the future of tech being. That is why I came to Stanford.

What would you change if you could go back to your 9th grade year and do it all over again? Nothing at all. Oh, except maybe showing up to volleyball tryouts. I signed up two years in a row and was too scared to go since I'd never played. I bet I would've been a total baller.

A Day in the Life

EMILY WILLIAMS Class of 2013

Studied Kinesiology and Math at Westmont College M.S. in Statistics from Colorado State University Currently works as a decision scientist at Ibotta

7:00 am: Alarm goes off, either via phone or via licks from my puppy, Gus. I get up and get ready for the day.

8:00 am: Take the dog out for a walk

8:15 am: Make an oat milk latte and toast up some homemade sourdough bread

8:30 am: Sit at kitchen table and check my work calendar for the day for any upcoming meetings. Open up Slack and respond to any messages or alerts.

9:00 am: Check out to-do's for the day. Prioritize team asks and reach out to relevant coworkers for any help that might be needed.

9:45 am: Hop on a Zoom meeting for a Squad stand-up. Update team on what I'm working on and any assistance I need from others.

10:00 am: Focus time working on updating dashboards and looking at company KPI's for any irregularities. Analyze data from a recently conducted test to determine learnings.

12:00 pm: Head out for a lunchtime training run for an upcoming half marathon

1:00 pm: Have a one-on-one meeting with an engineer squad leader to discuss an upcoming team. Brainstorm metrics we can investigate and begin making a plan to test the new app feature.

1:45 pm: Begin diving into data from previous discussion. Write up SQL queries and use R/python to do exploratory data analysis to look for interesting trends in the data that could be tested.

3:00 pm: Team white boarding meeting.

Here we meet with other decision scientists (non-managers) to problem solve issues or to brainstorm ideas for a test. If the team were in person, we would all gather around a whiteboard to draw up new ideas, but we try to simulate this virtually.

4:00 pm: Work on my innovation project

This could be taking a course, diving into interesting data or helping develop something new for the company.

5:00 pm: Wrap up with work

5:30 pm: Meet up for a puppy play date with Gus' best friend Archie

6:30 pm: Make dinner and eat while watching a *Parks and Rec* episode

8:00 pm: Work on a DIY project around the house

10:00 pm: Head to bed

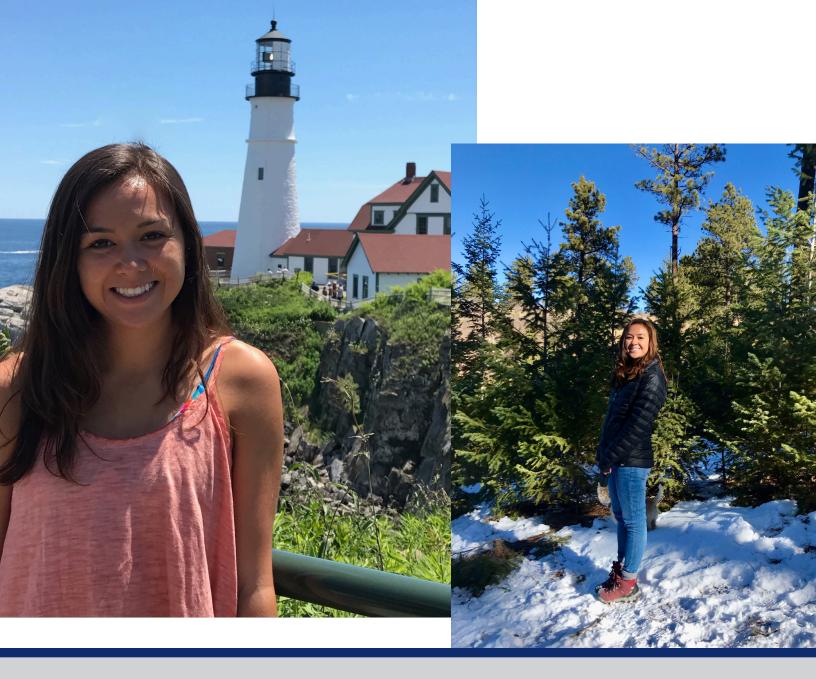
Did you ever wish you had a better idea of what college or a job would actually be like? Current students have a lot of ideas of possible majors or careers they may want to pursue without having concrete knowledge of what an academic program or career path actually entails. In order to help current and future Peak to Peak students determine their best fit for post high school options, we are putting out a call for contact information for Peak to Peak alumni, parents/guardians, and community members who would be interested in sharing their education and work experiences with our current students. Currently, this would include

email communication or a phone/video call. In the future, we are imagining this could include a job shadow or short internship opportunity.

Peak to Peak students are interested in learning more about all career fields and we would love to have contacts for students in as many different areas as possible. If you would be willing to share your experiences with a Peak to Peak student, please use the links below:

OR





What do you remember most about early STEM experiences at Peak to Peak? In elementary school, I don't remember exactly what we learned in STEM courses, but I do remember how fun the teachers made everything. In class, we dissected lamb eyes, launched rockets, and problem-solved. From early on, science and math felt accessible and useful!

What Peak to Peak experiences prepared you most for college? I really appreciated all the skills I learned at Peak to Peak and particularly, note-taking and exam preparation. In my college courses, I already knew how to listen to the lecture while also writing notes in a meaningful way. Then when I studied for exams, I had the skills to filter through notes for 'key concepts.' That way I was able to meaningfully study and work to remember overall concepts of the course.

Additionally, the foundation of algebra and calculus in middle and high school was a formative part of my education. As college (and even graduate school) math courses progressed in difficulty, I relied on the solid basics that I learned at Peak to Peak. In graduate school, I even had a professor complement my algebra and ask where I learned it!

Describe some of your STEM experiences so far in your career. In

my first job after graduate school, I worked for a company that was using vehicle-mounted gas sensors to estimate locations of methane leaks. With this job, I was a data scientist who worked with engineers, biologists, and other statisticians to help develop algorithms to improve efficiency and accuracy of the estimations.

At my current job, I work as a decision scientist for a mobile shopping application that helps savers receive money back on purchases. I work with engineers and designers to help make data-driven decisions. I appreciate that one of the main goals is to use data and statistics to advocate for savers and help optimize their cash back on everyday purchases.

What would you change if you could go back to your 9th grade year and do it all over again? Knowing the amount of programming and coding I do on a daily basis, I wish I would have taken more tech classes in high school. I took my first tech class my senior year at Peak to Peak and really loved it. I learned basic CSS and HTML. At my previous job, I was working on a project and needed to do some back-end coding. I was able to recall my high school coursework - for which I was very thankful!

Athletics

High School Boys Soccer

The Boys Soccer team enjoyed much success this fall season. They were senior heavy on varsity and their experience and camaraderie paid dividends. The team tied the then-ranked #1 in the state in 3A Colorado Academy 2-2 in double overtime. They also had a great win against a top ten opponent, Arrupe Jesuit. The winning goal came with just a couple minutes left in the match. The varsity team made it to the second round of the postseason tournament, but lost a close game to Atlas Preparatory School in Colorado Springs.



High School Girls Volleyball

New coaches brought a wealth of energy and new perspectives to the Girls Volleyball program. Both coaches played in college and drew on that experience to provide a positive experience for the teams. They had a great, five-set, comefrom-behind win at Kent Denver, and played some of the top teams in the Metro League. It was a tough season with several key players out with injuries. The season wrapped up with the regional post-season tournament. The varsity team played two tough schools and walked away with their heads held high.



High School Boys Golf

The Boys Golf team enjoyed a successful year marked by great improvement from top to bottom. They were able to host a Metro League tournament at their home course at the Omni Interlocken. The team qualified one player for the state tournament in Elizabeth, Colorado. The golf team looks poised to be very successful in the coming years as they have many returning players and have experienced much success with their off-season program.

High School Boys Tennis

The Boys Tennis team continues to be a popular option for Peak to Peak students. The participation numbers were strong this fall and with the experience of their coaches, the team enjoyed a successful season which included a quality win against Legacy High School and a third place finish at the Centaurus Invite. The team sent two doubles teams to the state tournament in Pueblo, and enjoyed a Number 3 Doubles victory.



High School Softball

The Softball team had a successful season that drew to a close after a run at the state tournament. They enjoyed great wins against Standley Lake High School and Faith Christian Academy. Hampered by injuries, the team came together to qualify for the post-season, and qualified for the state tournament by beating Wiley High School in the regional round, 10-0. Ultimately, they lost a tough match-up to Éaton, but the team was proud to be the first in over a decade to qualify for the state tournament.





Programs Outside of Peak to Peak

Each year we have many students participate in athletic programs at other schools when Peak to Peak does not offer that specific program. This year, students participating on the Broomfield High School Gymnastics team won the 5A State Championship. Several students also participated on the Erie High School Football team which has made it to the third round in the 4A State Championship as of this writing.

High School Cross Country

The Cross Country team capped a great season with both the Boys and the Girls teams returning to the State Championship meet for the first time in several years. The Girls placed 20th, with strong performances from several team members. On the Boys side, a young team that included four freshmen finished in 15th place. The team continues to grow and, with a big crew of underclassmen, is already looking forward to next year.

Middle School Teams

The Middle School Boys Soccer team had a great turnout this year. The team has been growing in popularity since being offered to sixth graders. The coach is knowledgeable and kind, working to align with the high school program and make sure that there is continuity as players move into high school.

The Middle School Cross Country team saw its largest turnout ever this year with over forty participants. The overall experience has been positive from students and coaches alike. The team had several outstanding performances in the final meet of the year which solidifies a strong future for the team.

The Middle School Girls Volleyball team was led by two new coaches who brought their backgrounds in volleyball and strong teaching skills to provide a wonderful experience for the team. Their focus was about learning fundamentals and having fun. They brought a true team approach and saw remarkable improvement as the season progressed.



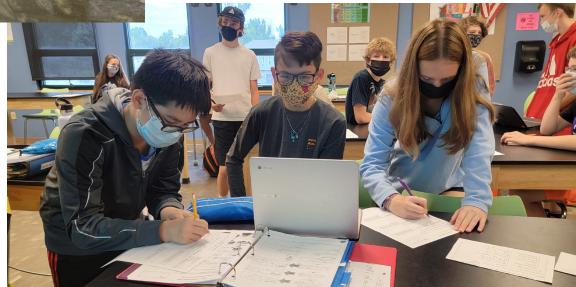
STEM: As Seen of



Above: Ninth-grade students taking Biology went on a walking field trip to Coal Creek to examine the flora and fauna found in riparian environments.

Upper right: Seventh-grade students in Earth Science work with Mr. Knox to better understand measurements, volume, and the instrumentation used in science.

Lower right: Eighth-grade students review their notes in Physical Science to prepare for an upcoming presentation and assessment.





Left and below: High school students in the post-Advanced Placement Multivariable Calculus 3 Honors course work with Mr. Lehr to examine, practice, and model threedimensional functions using a variety of tools, including play-doh!

PRAR

on Campus



Upper left: Fifth-grade students experimented with dyed celery to make observations about the vascular system and the function of plant xylem.

Left: In a collaboration between the middle school Garden Club and the middle school Kitchen Chemistry class, students harvested seeds from the autumn garden to be recycled in the school's <u>Seed Library</u>.

Below: High school students in Advanced Placement Chemistry use sugar solution at differing densities to make "rainbows."

PORT YOU



Left: A high school biology student searching for and finding the remnants of vertebrates.

Below: First-grade students building colorful "volcanoes" for an experiment mixing baking soda and vinegar.





The Peak Scholarship Fund

Peak to Peak Alumni from the past several years likely remember the inception of the Peak Scholarship Fund, founded in 2014. As Peak to Peak continued to make it a priority to get every student admitted into a college of their choice; we confronted the issue that the cost of a college education presents a significant barrier to continuing education for many of our students by creating the Peak Scholarship Fund. Despite exceptional education and preparation, every year Peak to Peak has 6 to 12 graduates who live at a level of poverty that does not allow them to go to college.

The <u>Peak Scholarship Fund</u> bridges the gap between college acceptance and college attendance for those students who would not otherwise be able to afford a college education. Individuals from throughout the Peak to Peak community are invited to support this important campaign, as each year we strive to award four \$3,000 4-year scholarships. For those interested in directly supporting Peak to Peak students, the Peak Scholarship Fund is a great opportunity to do so. Your gift to the Peak Scholarship Fund helps ensure every student will be on a college campus where they have a future to pursue their dreams. Donations of all amounts are the difference-maker in the lives of our students. YOU'RE INVITED!

We would love to see you at our

annual Peak Gala on March 11th, 2022

at the Omni Hotel in Broomfield. Click to enjoy a special ticket price for Peak to Peak alumni: \$50



Our annual Homecomina Tailgate Party was a festive way to kick off our school year with local food trucks and activities hosted by Peak to Peak high school clubs.

Peak to Peak hosted its first-ever Cornhole Tournament to benefit athletics and activities. Puma fans and spectators enjoyed a fun afternoon, cheering on the mixed teams and levels. The winning team ("Last Bag Standing") beat out basketball coach and high school math teacher, Joe Howard, and his talented partner Peak to Peak social studies teacher, Carla Flanhofer. Baseball coach, Matt

Castilleja, and middle school science teachers, Brandon Nelsen and Brian Knox, also had strong showings against some tough high school players and parents.



Alumni Updates

Class of 2007

Chester Wang

Current City: Broomfield, CO Graduations: B.S./B.A. Finance, University of Colorado Boulder, 2011 Current Job: Private Banker at J.P. Morgan Private Bank

Class of 2013

Blaise DeFranco Current City: Chicago, IL Graduations: B.A. Applied Mathematics & Spanish Language, New College of Florida Current Job: Associate Attorney at Kirkland & Ellis, LLP

Class of 2014 Adrian Salmen

Graduations: B.S. Criminology & Criminal Justice, Arizona State University, 2018; J.D. Law, University of Wisconsin, 2021 Current Job: Programmer Analyst at Broadridge Financial Solutions

Class of 2016

Hannah Luebe (Scherr) Current City: Broomfield, CO Graduations: B.S. Interior Design, Abilene Christian University, 2020; A.A. Architecture, Abilene Christian University, 2020 Current Job: Interior Designer at G Squared Design Marriage: Mark Luebe, 2020

Class of 2018

Robin Peterson Current City: Lafayette, CO Graduations: B.A. Government, Claremont McKenna, 2022

Class of 2019

Hope Schwanke Current City: Brighton, CO Graduations: B.S. Criminal Justice, University of Colorado Denver, 2023

Kai Stahoviak Current City: Slidell, LA

Kaatje Jones, Class of 2009 was

interviewed for an article that appeared in The Colorado Sun highlighting Telluride's Original Thinkers festival, an event that Jones attended along with other members of Peak to Peak's Peace Jam chapter back in 2006.

Click here to read the article.

Alumni:

We want to hear from you!

As our school matures, our alumni community grows. Stay connected with us so that you can participate in alumni events and opportunities. Use the links at the bottom of this page to send us your contact information and updates, join our LinkedIn community, or follow us on Facebook.

Once a Puma, Always a Puma!

Artists on the Back Cover:

Digital Art I students created photo montage artworks to express themselves as individuals.



🛂 Kylie Ford 9th grade



Imaani Razzak 10th grade



Max Brazy 10th grade



Molly Anderson



Vaibhav Jasti и 9th grade

Tyler Holman 9th grade



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