

TeenTechSF

GLOBAL



THE MIX



THE MIX



2020-2021 Annual Report

Prepared by Charmi Buddaluru, Communications Co-Chair





innovate
collaborate
create

TeenTechSF GLOBAL 2020-2021 Annual Report

TeenTechSF is a 501(c)(3) nonprofit

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Founder's Message

Adversity is the Mother of Innovation



We will always be stronger for struggling through a time of adversity together. Bamboo bends, but does not break. Instead it snaps back twice as hard. Last year in the midst of the COVID-19 pandemic, TeenTechSF pivoted to an all online program. The challenge we faced was not to survive the pandemic, but to take this moment of clarity, reflect on who we are, and move forward, motivated by adversity and ask ourselves:

- **INNOVATE:** How can we think differently and use tech to support students in our communities who are disproportionately impacted by disruptions?
- **COLLABORATE:** How can we come together as diverse and inclusive groups and use tech to fight for a more equitable society?
- **CREATE:** What are the critical needs in our community and how can we use tech tools to meet those needs?

TeenTechSF - Innovate, Collaborate, Create isn't just a tagline to slap on our t-shirts. It's what we strive towards every day. This year we had an amazing TeenTechSF student leadership team that not only survived the pandemic, but showed the resilience of bamboo by snapping back twice as hard. Our TeenTechSF Global Youth Summit keynote speaker, Luis Valentin, was a UC Berkeley researcher whose findings in plant biology contained the roots of the CRISPR gene-editing technology used in the development of messenger RNA (mRNA) COVID vaccines Pfizer and Moderna. This innovative response to adversity is opening up a brand new field of scientific discovery. Luis also engaged students in our first bilingual Spanish breakout with students from the Bay Area and as far away as Buenos Aires participating!

In our own way, TeenTechSF also used adversity to open up new ways to innovate, collaborate, and create.

INNOVATE: Our innovative online program was hugely successful, resulting in more frequent and successful student interactions, especially among young women and public school students. TeenTechSF's STEM workshop program boosted participation by 5x

compared to onsite participation. Online efforts were extremely cost-effective and helped us spend our funding more effectively. They also opened up participation among speakers, student leadership, and participants from as far away as Taiwan, France, the United Kingdom, India, Canada, Argentina, and across the United States. We are continuing expansion of our online efforts, but we are also eagerly looking forward to opening up targeted onsite activities through TeenTechSF's "Tech Where You Live" events focused on underserved communities whose level of engagement during COVID was impacted the most.

COLLABORATE: During COVID, the TeenTechSF student leadership focused on using tech to help those most in need in our communities. We reached out to both long-standing and new partners in these efforts collaborating with the SF Human Rights Committee, UCSF, Youth Funding Youth Ideas, the Youth Empowerment Fund, and BLING to deliver thousands of cloth masks, face shields, and pair tech-savvy student leaders who made hundreds of calls to those in need of friendly support in navigating the COVID-19 vaccination system. Our TeenTechSF STEM Inclusivity Forum keynote, Bonnie Chiu, founder of Lensational, focused on the intersection between tech and social impact, exploring how digital skills can empower marginalized groups to tell their stories and bear witness to their lived experiences.

CREATE: Our TeenTechSF student leaders also initiated creative, new proposals during the pandemic. We supported the efforts of our nonpartisan sister organization, When YOUth Vote to amplify youth voices and encourage civic engagement among youth both raising awareness of the youth vote and youth issues during the November 2020 elections and with the April 2021 Civic Engagement Summit and the May 2021 Amplify Asian Voices Summit standing in solidarity with youth leaders and allies to Stop Asian Hate. We also expanded our STEM workshop programming and added a new Entrepreneurship speaker series which was highly popular.

Out of adversity, we have learned lessons and are snapping back with twice the force. We are looking forward to an amazing year going forward as we can move forward with a hybrid model: re-establishing our onsite efforts in an even more targeted way and continuing to expand our online activities that have proven so broadly effective in outreach and cost-effectiveness.

Marc Robert Wong
TeenTechSF Founder and Executive Director

Our Mission

TeenTechSF's mission is to empower the next generation of tech innovators and civic entrepreneurs through conferences, hackathons, and workshops.

We are committed to equal access to tech for all teens, because diversity fuels innovation.



TeenTechSF Milestones

2013

TTSF founded 1st TTSF Conference

2014

TTSF@YaleTech
TTSF@Stanford
TTSF@MLFmonde
TTSF@CERN

2015

TTSF&US State Dept (Angola/
Mozambique)
TTSF@Harvard
TNY founded
1st TTSF STEM Inclusivity
Forum
TTSF@TEDxYouth
1st TTSF Civic Hackathon
TTSF@Salesforce
TTWA founded
1st TTSF Global Youth Summit

2016

TTSF@UCBerkeley
TeenTechCHINA founded
TTSF@Runway w/ Oracle Team
USA

2017

TeenTechTUNISIA founded
TTSF March4Science
TTSF@CalAcademy
#TeenScienceNight
TTSF@Microsoft

2018

TTSF 501(c)(3)
1st TTSF Board Mtg
TTSF@PlayStation
TTSF@MakeSchool
TTSF@GoogleCloud
TTSF@BASF (Bay Area Science
Festival)

2019

TTSF&SF Youth Commission
TTSF@NightOfIdeas
TTSF@GoogleSF

2020

TTSF COVID Connect
TTSF Online STEM Workshops
TTSF @BACCC (Teach for the
Bay - Community Colleges)

2021

TTSF Personal Protective
Equipment Project

COVID Vaccine Initiative w/ SF
Human Rights Commission &
UCSF

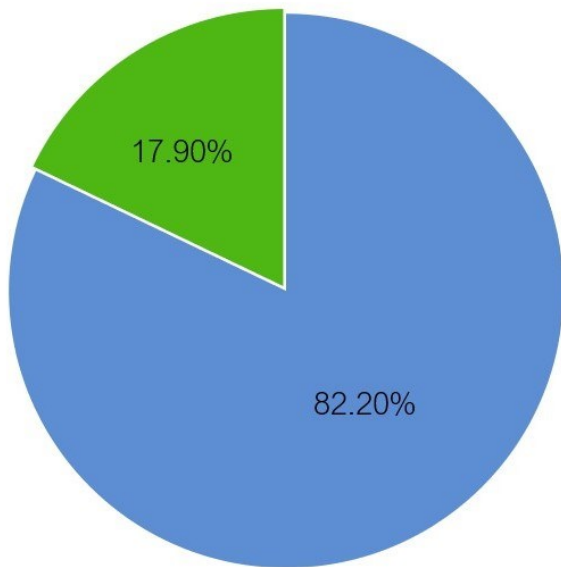
TeenTechSF Entrepreneurship
Speaker Series

Our Impact

2,000+ students participate annually in TTSF events, workshops, and partnerships

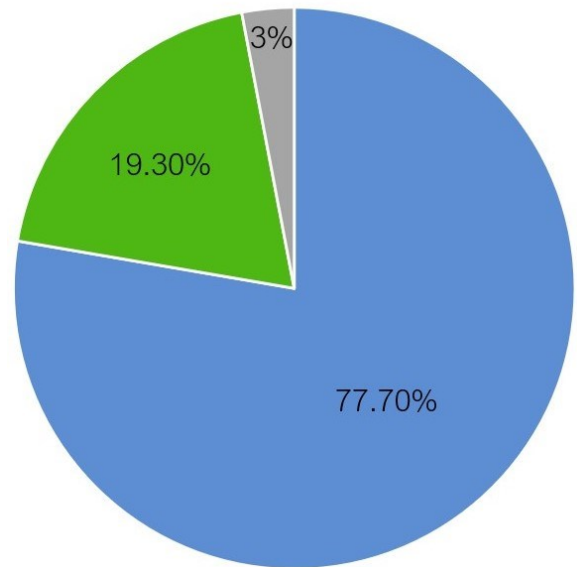
Engaging New Students in STEM

■ First Time ■ Prior Experience



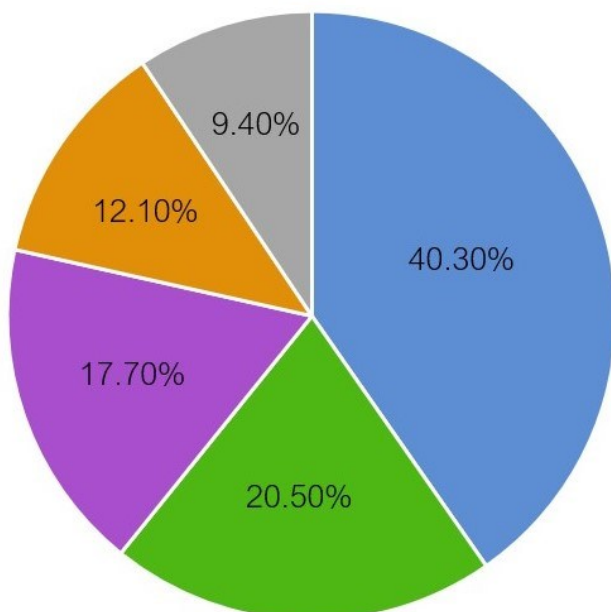
Majority of Students from public schools

■ Public ■ Private ■ Homeschool



Introducing Younger Students to STEM

■ Middle School ■ 9th ■ 10th ■ 11th ■ 12th



TeenTechSF is a gateway experience for first-time coders

- 58% female participants at STEM Inclusivity Forum and Global Youth Summit
- 92% of our attendees came from racial/ethnic minority backgrounds
- Almost 500 students participated in TTSF's signature events
- 150 public school students at Global Youth Summit
- 72% first time hackers at 2020 Civic Hackathon

Diversity, Equity, & Inclusion

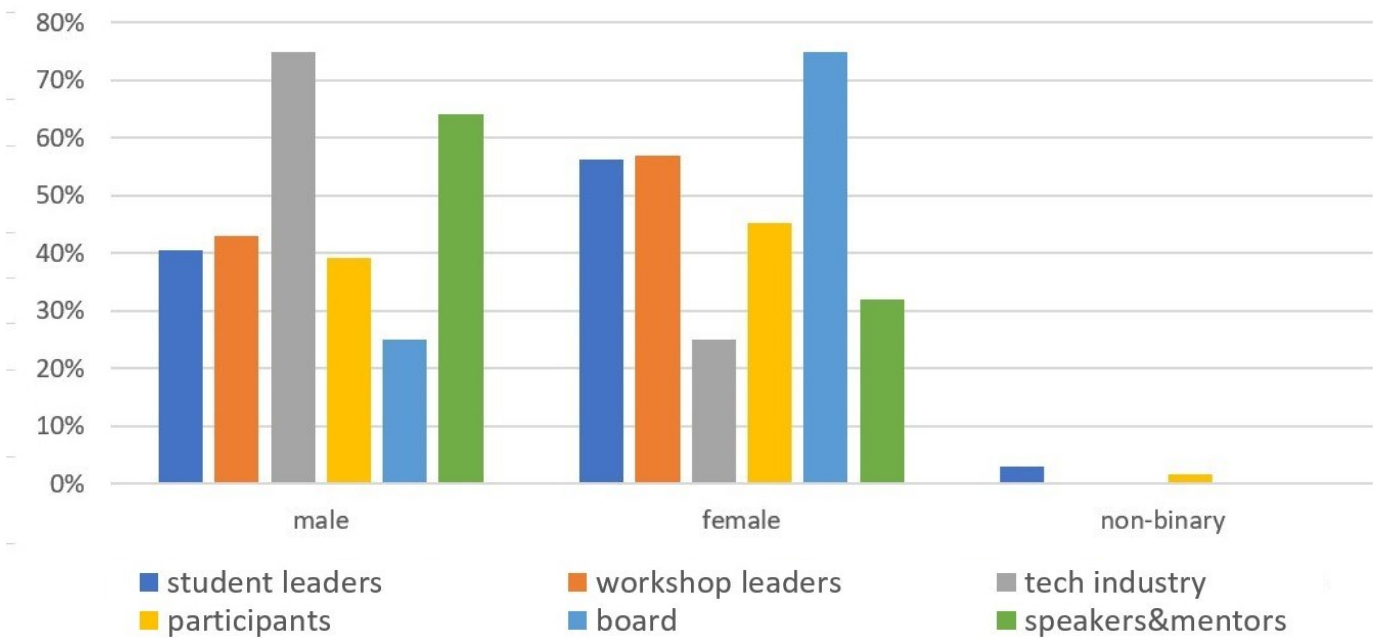
TeenTechSF vs. 2020 Tech Industry

TeenTechSF is gender-balanced, with strong support for lower socioeconomic groups!

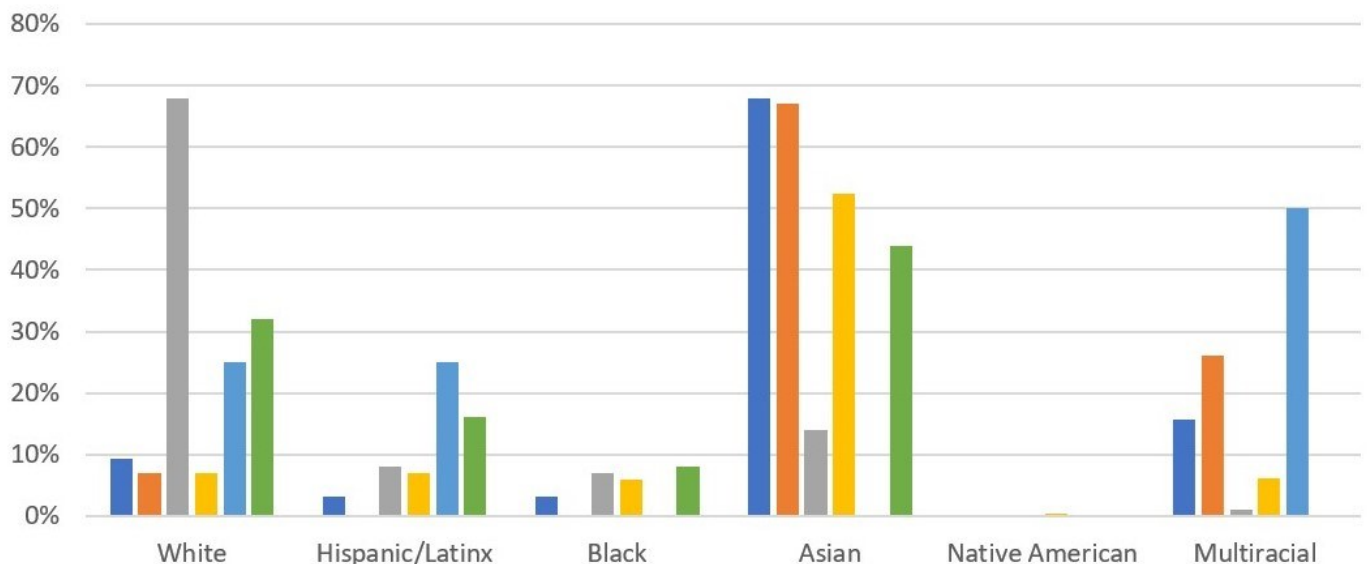
We have reached equality between genders and leveraged a strong Asian involvement, but we need to improve DEI in student participation by focusing on:

- ⇒ Females & non-binary participants at Civic Hackathon
- ⇒ Underrepresented minorities from African American, Hispanic, & Native American communities

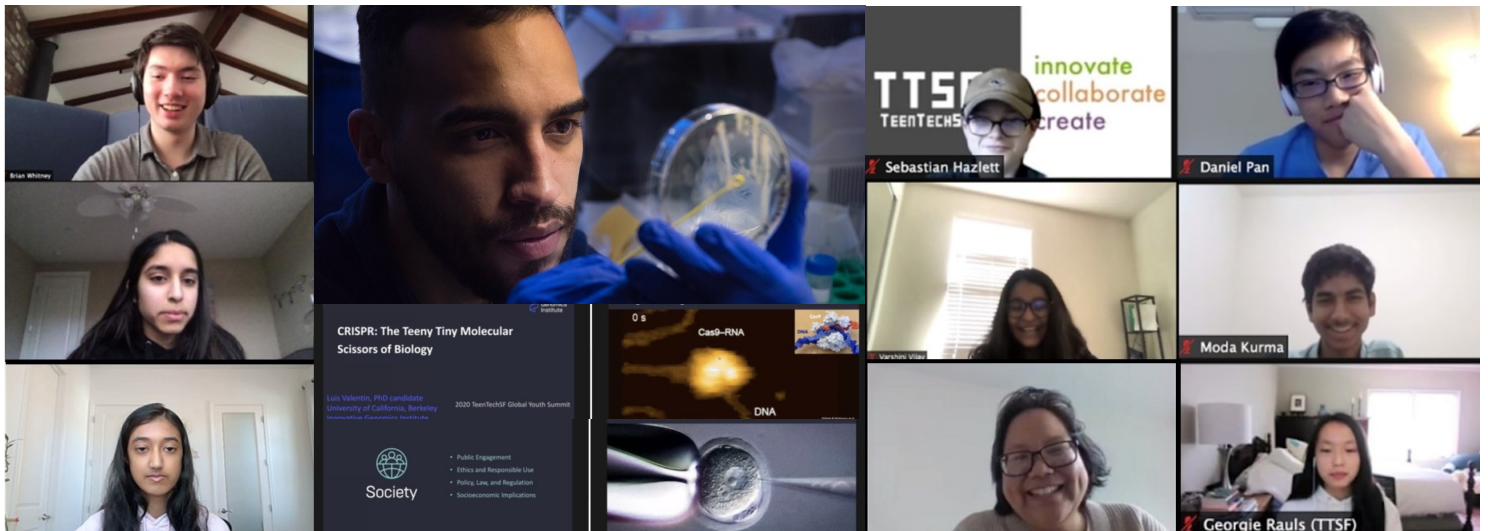
Gender Breakdown



Race/Culture Breakdown



What We Do: Signature Events



TeenTechSF Civic Hackathon — *Coding for COVID + COMMUNITY*

Our Fifth Annual TeenTechSF Civic Hackathon had teens from across the nation participating for two action packed days of creating, coding, and problem-solving. This beginner-friendly event has experienced mentors including TeenTechSF student leaders and Make School volunteers that were available on Discord and Zoom to help participants, 75% of whom were first-time hackers, build their tech skills with workshops on coding, website and app design, prototyping, and pitch development. The winning teams created an AI emotion interpreter to increase confidence, an alternative to existing online learning platforms, apps consolidating COVID-19 information, and an app that provides an immersive experience of the American justice system through stories.

TTSF Global Youth Summit — *Tech & Health: Understand More, Fear Less*

Over 150 teens, of which three-quarters were from public schools, came together to learn about the intersection of technology and health, and its impact during COVID-19 with a live keynote by Luis Valentin-Alvarado from UC Berkeley and a special breakout room in Spanish. Video messages from Seattle, New York, Paris, Tunis, Nairobi, Shanghai, Chengdu, and Hong Kong were presented, followed by Civic Hackathon pitches and STEM workshops on COVID-19 Data Analysis, Intro to PyGame, Machine Learning, and other coding activities as part of the global Hour of Code initiative.

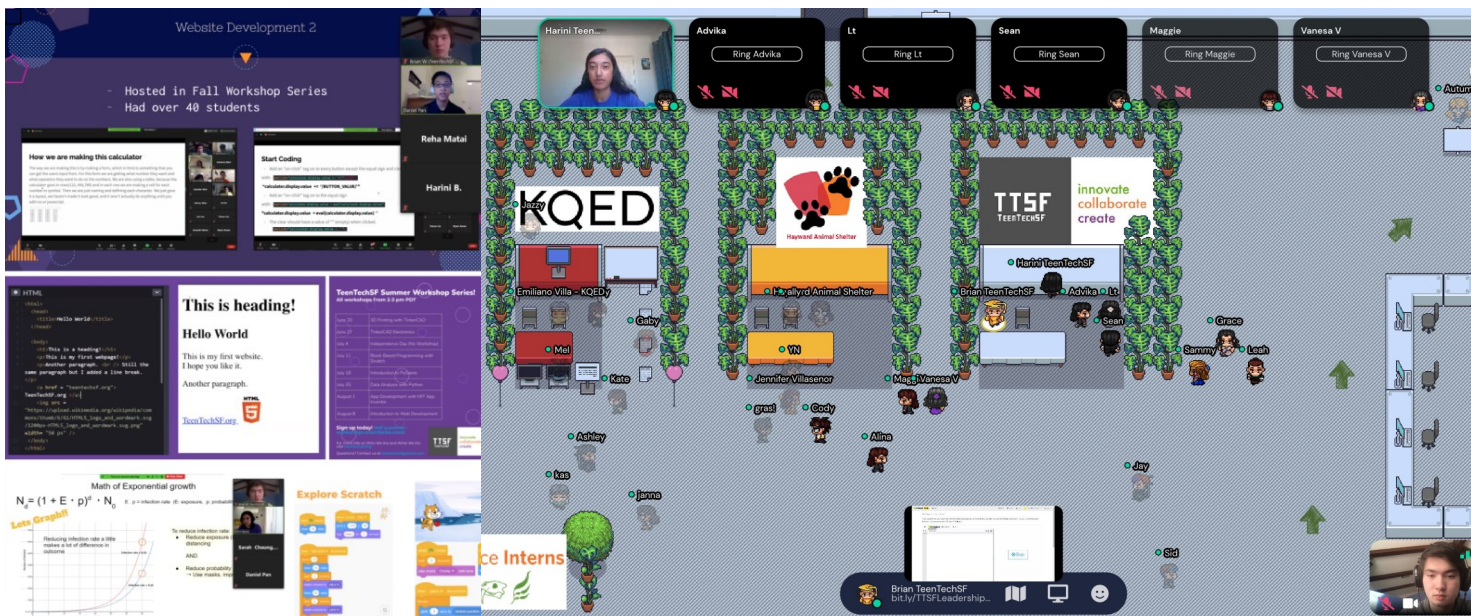
STEM Inclusivity Forum — *Bridging the Digital Divide*

Beginning with a special keynote from CEO of Lensational, Bonnie Chiu, joining us from London on “Pursuing entrepreneurship at the Intersection of Social Impact and Technology”, the event later featured a STEM Opportunities Panel and networking breakout sessions with organizations including Salesforce Racial Equity Task Force, Youth Funding Youth Ideas, Technovation, Feminist AI, and NASA offering opportunities, resources, and internships to teens interested in the STEM field. This was followed by youth-led technical and professional skill-building workshops on 3D printing and mask sewing showcasing our PPE initiative, app development, game design, and website development to help attendees build a digital portfolio.

New Projects

Year-Round Online TeenTechSF STEM Workshops

Since shelter-in-place was first ordered, the TeenTechSF workshop team developed dozens of online workshops, which were offered as Summer, Fall, and Spring Workshop Series events. Each consisted of eight to ten weekly workshops on topics including 3D printing, computer-aided design, web design, mobile app development, and COVID-19 data analysis. We experimented with offering multiple weeks of workshops on the same content, allowing attendees to develop a deeper understanding of one aspect of tech. We utilized Zoom for most of our workshops and took advantage of the breakout room system to help people that are behind.



Virtual Map of California Academy of Sciences #TeenScienceNight: Harini Buddaluru leading TeenTechSF STEM Workshop online

TeenTechSF Joins Teach for the Bay Conference

TeenTechSF is proud to be the only group of student leaders invited to speak at the Bay Area Community College Consortium's Teach for the Bay Conference. Over fifty teachers-in-training in community colleges around the Bay Area joined our workshop on student-led STEM educational equity during COVID-19, where our STEM Workshop team discussed the transition to online workshops and how educators can make instruction interactive and engaging in the online space.

TeenTechSF Entrepreneurship Speaker Series

Our first-ever speaker series was done in collaboration with Bentley School's Design Thinking Engineering Club, hosted on four Saturdays in March and April. Speakers included SwingVision CEO and UC Berkeley Data 8 Instructor Swupnil Sahai, CEO and Co-Founder of Shasha Network Farai Munjoma, teen startup founder of Munch Chloe Chia, and former teen startup founder of Nohbo and Shark Tank entrepreneur Benjamin Stern.

New Projects

COVID-19 Initiatives: Leveraging Tech for Further Civic Engagement

PPE Initiative (Personal Protective Equipment)

TeenTechSF took part in the MLK National Day of Service in order to launch our PPE initiative. With COVID cases skyrocketing and ICU capacity dwindling, we realized that it was a critical time for all of us to get involved. In the spring, our student leaders were able to exceed our original goals through two deliveries of PPE, totaling 2712 sewn masks (including special child-sized masks as requested by community-based organizations) and 232 3D-printed face shields. Our equipment was distributed through the San Francisco Human Rights Commission to support the Latino Task Force and our most vulnerable community members.

Special thanks to St. Ignatius College Preparatory, San Francisco, the engineering department at Quarry Lane School, and The Sewing Machine Shop for letting us utilize additional 3D printers and sewing machines to support our PPE-making, and to Kuriosity Robotics for their continued support and mentorship in face shield-making.



COVID-19 Vaccine Initiative

TeenTechSF is assisting priority groups on navigating the complex vaccination system, recognizing that those who are most in need of the vaccine are often the ones who require the most assistance in navigating the online process to schedule for one. For the past few months, we have helped seniors, essential workers, and BIPOC communities locate the nearest vaccine, make reservations, arrange free or discounted Uber rides, and regularly follow up with them through text or phone calls. TeenTechSF has partnered with Dr. Butler's medical team at UCSF to ensure that a lack of technological support does not prevent priority groups from getting vaccinated.

When YOUth Vote

Run by and for youth, When YOUth Vote is a nonpartisan nonprofit amplifying youth voices and increasing youth voter turnout. When YOUth vote, we change the world!

When YOUth Vote is a nonprofit fiscally sponsored by TeenTechSF. Co-founded by Sarah Cheung, Elisa Rae Yeung, and Shavonne Hines-Foster in Fall 2020, When YOUth Vote seeks to address the lack of youth representation in voting and civic affairs by 1) making community advocacy opportunities and resources accessible to young people and 2) empowering young people to take initiative through workshops and events with positive role models.

Mobilize Youth Vote Leading Up to November 2020 Election

After successfully securing \$10k in funding from the YMCA Youth Empowerment Fund, we put up nearly 1,000 posters throughout SF designed by USC Art Lecturer and activist Eric Junker encouraging people to vote. We also created a texting platform where anyone could fill out a form indicating their areas of interest (homelessness, sustainability, etc.) and sent relevant opportunities and resources via text to make them as accessible as possible.



Youth Community Leadership Summit

Our summit in March highlighted USC Professor & Founder of the Center for Inclusive Democracy Dr. Mindy Romero, who gave a keynote on the Power of the Youth Vote. Afterwards, we featured interactive workshops and panels on how young people can get involved with community advocacy. Panelists Julie Wong, Marlinda McPhail, and Elisa Yeung delivered key lessons on receiving the last thousand votes, taking the courage to start new initiatives beyond your comfort zone, and balancing activism & academics as a college student. The event concluded with a video interview featuring USC Art & Design Lecturer Eric Junker and his recent work promoting voter turnout in the last presidential election.

Amplify Asian Voices: #StopAsianHate

Our event on May 8th celebrated Asian American and Pacific Islander Heritage Month and denounced anti-Asian hate and violence by hearing from Asian youth activists and organizers who have created initiatives bringing awareness to the rise in violence towards the AAPI community. Panelists and speakers included thirteen year old activist and fashion designer Ashlyn So, co-founder of Chinatown Pretty Valerie Luu, and other founders of AAPI advocacy groups. We had two panels that attendees could choose from, one of which had a panel of youth activists ranging from middle school to college students. We had approximately forty unique attendees, most of whom had not previously attended our Civic Engagement Summit or followed us on social media. At the end of the event, we had an open Q&A session where panelists and speakers discussed topics such as lack of diversity in higher education and Black and Asian solidarity.

Our Volunteers

3,202
student
hours

1,143
adult ally
hours

4,345
total
hours

TTSF alumni
leaders attend:

Brown,
Cal Poly,
Carnegie Mellon,
Dartmouth,
Georgia Tech,
Hampton,
Harvard,
Stanford,
UC Berkeley,
UC Davis,
UPenn,
USC,
& Yale

TeenTechSF Board & Leadership Team

TeenTechSF GLOBAL Board

CEO/Founder: Marc Robert Wong, Stanford '19 BA, '20 MS
Computer Science, Software Engineer, Apple

COO: Emilie Robert Wong, Harvard '18 BA Neuroscience/Literature,
Associate Editor, Enchanted Lion Books

CFO: Veronica Urdaneta, Lawrence Hall of Science
Director of Volunteer Programs, UC Berkeley

Secretary: Catherine Cormier, The Mix at SFPL, Teen Digital Learning Lab
and Maker Space, San Francisco Public Library, Main Library, Teen Librarian

TeenTechSF Student Leadership Team

	<i>2020-2021 Leaders</i>	<i>2021-2022 Leaders</i>
<i>President</i>	Sarah Cheung	Brian Whitney
<i>Vice President(s)</i>	Brian Whitney	Harini Buddaluru Reha Matai
<i>STEM Workshop Chairs</i>	Brian Whitney	Daniel Pan Georgie Rauls
<i>STEM Workshop Vice Chairs</i>	Daniel Pan Emre Yavuz	Emre Yavuz Emily Sidharta
<i>Communications Co-Chairs</i>	Shavonne Hines-Foster Harini Buddaluru Reha Matai	Agnes Liang Charmi Buddaluru
<i>Finance Chair</i>	Colton Lum	Colton Lum
<i>Finance Vice Chair</i>	Tommy Higgins	Sarah Zhang

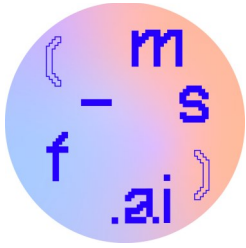
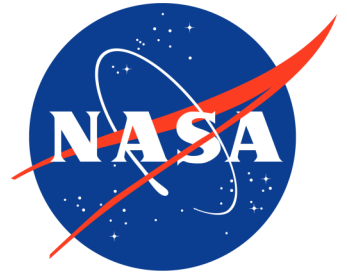
Presidential Volunteer Service Gold Awards earned by Sarah Cheung, Brian Whitney, Agnes Liang, Emily Sidharta, Reha Matai, Harini Buddaluru, Varshini Vijay, Georgie Rauls, Moda Kurma, Daniel Pan, and Sarah Zhang.

Graduating Seniors attending Yale & Hampton (HBCU) President Sarah Cheung and Communication Co-Chair Shavonne Hines-Foster are both headed out of state with substantial scholarships. Sarah will be attending Yale University and Shavonne will be attending Hampton University, our first student to attend an HBCU (Historically Black Colleges & Universities).

Tech Partners

facebook

Google



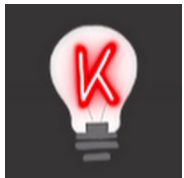
Feminist.ai



lensational
www.lensational.org



Masks for All CA



Kuriosity Robotics



MAKE
SCHOOL

Community Partners



- ◇ Youth Empowerment Fund
- ◇ SF Human Rights Commission
- ◇ Mission Laïque Française
- ◇ UCSF
- ◇ Shasha Network
- ◇ Bay Area Teen Science



Berkeley
UNIVERSITY OF CALIFORNIA

Major Grants & Contributions

Youth Funding Youth Ideas

We're proud to have partnered with YFYI for four years of youth entrepreneurship empowerment! YFYI helped us launch our first STEM workshop programs reaching at-risk SF students from underserved communities. They helped us buy our first video camera so that we could livestream our events to different TTSF partners around the world. They've empowered our youth leaders through honoraria to use for college. This past year, we've used YFYI funds to support our transition online and for purchasing equipment in order to 3D print face shields and sew masks. YFYI believed in us when no one else did and continues to mentor and support our program!

Youth Empowerment Fund

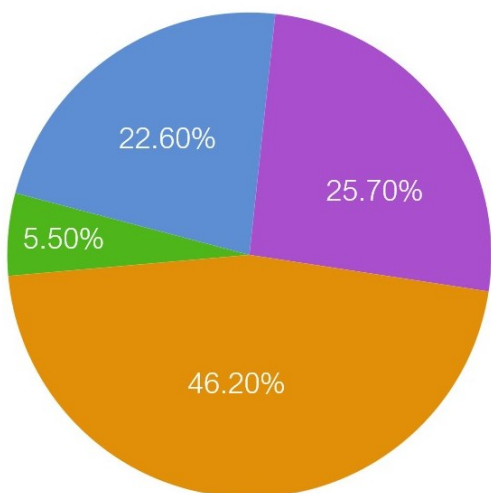
We are excited that YEF has chosen TeenTechSF as one of the organizations they are supporting for the first time. With YEF funding, we were able to purchase enough materials for our PPE Initiative so all the members of our team could help directly in the growing need for masks and face shields during the pandemic. This initiative was a new but defining moment in our history, and the support from YEF helped TeenTechSF serve a greater audience and take the opportunity to make a change in the current circumstances to provide much needed protective equipment for those most in need during the COVID-19 pandemic.

Individual Donations

Interested in donating to TeenTechSF? We are a registered 501(c)(3) nonprofit, and we ask that you give \$5 if you're able to support our efforts to make sure that no student is left out of the digital disruption. If you're able to give \$25, we'll send you a #WearBecauseYouCare TeenTechSF washable 3-ply mask or a TeenTechSF t-shirt in Founder's Gray, **Innovative Green**, **Collaborative Orange**, **Creative Purple**, or **Global Blue** to say thank you!

2020-21 Income: \$21,654.23

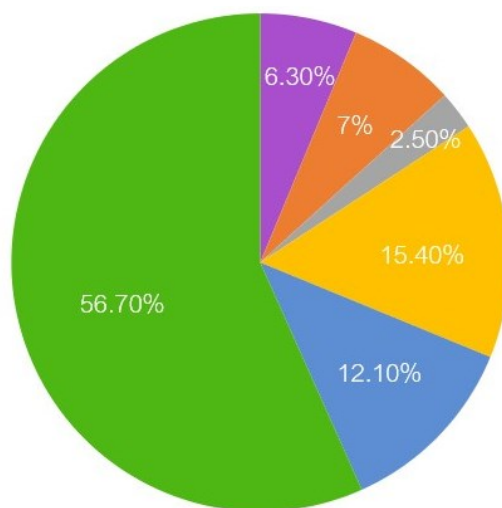
- Individual & Smaller Donations
- TTSF YEF
- YFYI
- WYV YEF



2020-21 Operating Expenses: \$22,094.13

Note: Minor shortfall of less than \$500 covered from cash reserves.

- Fundraising
- Overhead
- Youth Leadership
- Youth Honorarium
- Youth Outreach
- Events + Workshop



Equity Is a Verb

COO's Closing

We are so proud of our TeenTechSF student leaders and all the amazing work they have done this year!

TeenTechSF is an opportunity for students to show that it's your ideas, not your age, that matter. Part of our mission statement is to be run by and for teens, and this year, we nearly doubled the number of hours the TeenTechSF team spent planning conferences, leading workshops, and collaborating on community projects. This was a tough year with many challenges presented by COVID-19, but the TeenTechSF student leaders persisted, working tirelessly to recruit and train the next generation of tech innovators and civic entrepreneurs.

Graduating TeenTechSF President Sarah Cheung tripled the number of students coming to the monthly planning meetings with her engaging and result-focused leadership style. And incoming TeenTechSF President Brian Whitney challenged students to plan and contribute more than ever before, encouraging participation outside of our monthly meetings during weekly tracking meetings and building the strong team we have heading into the upcoming year.

The majority of TeenTechSF leaders also gave back to their communities by fabricating cloth masks and using 3-D printers to make thousands of masks and face shields. Tech savvy student leaders also made hundreds of calls to the elderly and other underserved groups, helping those in need navigate the COVID vaccination system. When you empower student leadership, they do great things: coming up with new proposals for "Tech for Good," teaching workshops reaching out to students in underserved communities for "Tech Where You Live," and working with each other to generate new workshop topics and speaker series.

And yet, this is not enough. Equity is a verb, and we need to continue efforts to make sure that we not only provide equal access, but that we provide equitable access. No matter how amazing each year is, TeenTechSF is forever in beta. We will always strive to improve our outreach and engagement with students from underserved and underrepresented communities. We have used tech tools to increase access and engagement in our events—and since we've shifted to offering workshops online, five times more students have been able to participate. But while absolute numbers improved, especially for girls, public school students, and Asians, we need to engage and support Black and Hispanic students to the same extent.

Online events are wonderful. But this coming year, we're also going to reestablish our onsite workshops and work even harder to bring tech opportunities to communities with students who might otherwise be left on the outside looking in. As SF Board of Supervisors President Walton says, "Tech is not our future. It's our present." We need to help students, especially those from underserved and underrepresented communities, engage in tech activities, build tech skills, and change the world—because diversity fuels innovation.



- Emilie Robert Wong
TeenTechSF COO

Get Involved!

Are you...

(a) a student interested in attending our conferences, hackathons, and workshops?

Join our mailing list at teentechsf.org, and follow us @teentechsf on social media (YouTube, Twitter, Facebook, and Instagram).

(b) a teen interested in joining our leadership team?

Fill out our leadership interest form, or email teentechsf@gmail.com.

(c) a tech professional interested in speaking, leading a workshop, co-hosting an event, or other mentoring opportunities?

Email Marc at marc@teentechsf.org.

(d) a company or organization interested in sponsoring us or in partnering with us on an event or project?

Email Emilie at emilie@teentechsf.org.

(e) none of the above, but still want to support what we do?

Donate at teentechsf.org—we are a registered 501(c)(3) nonprofit!

Find out more about who we are and what we do at teentechsf.org. We're also on YouTube, Twitter, Facebook, and Instagram.



2020-2021 Annual Report prepared by
Charmi Buddaluru, Communications Co-Chair
TeenTechSF GLOBAL is a 501(c)(3) nonprofit.



TEENTECH  **GLOBAL**

Innovate Collaborate Create

FOR A BETTER WORLD