

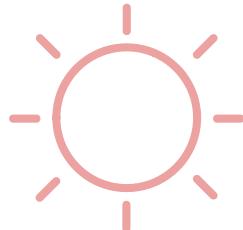


Expand Your Horizons

TECHNICA

2020 Annual Report

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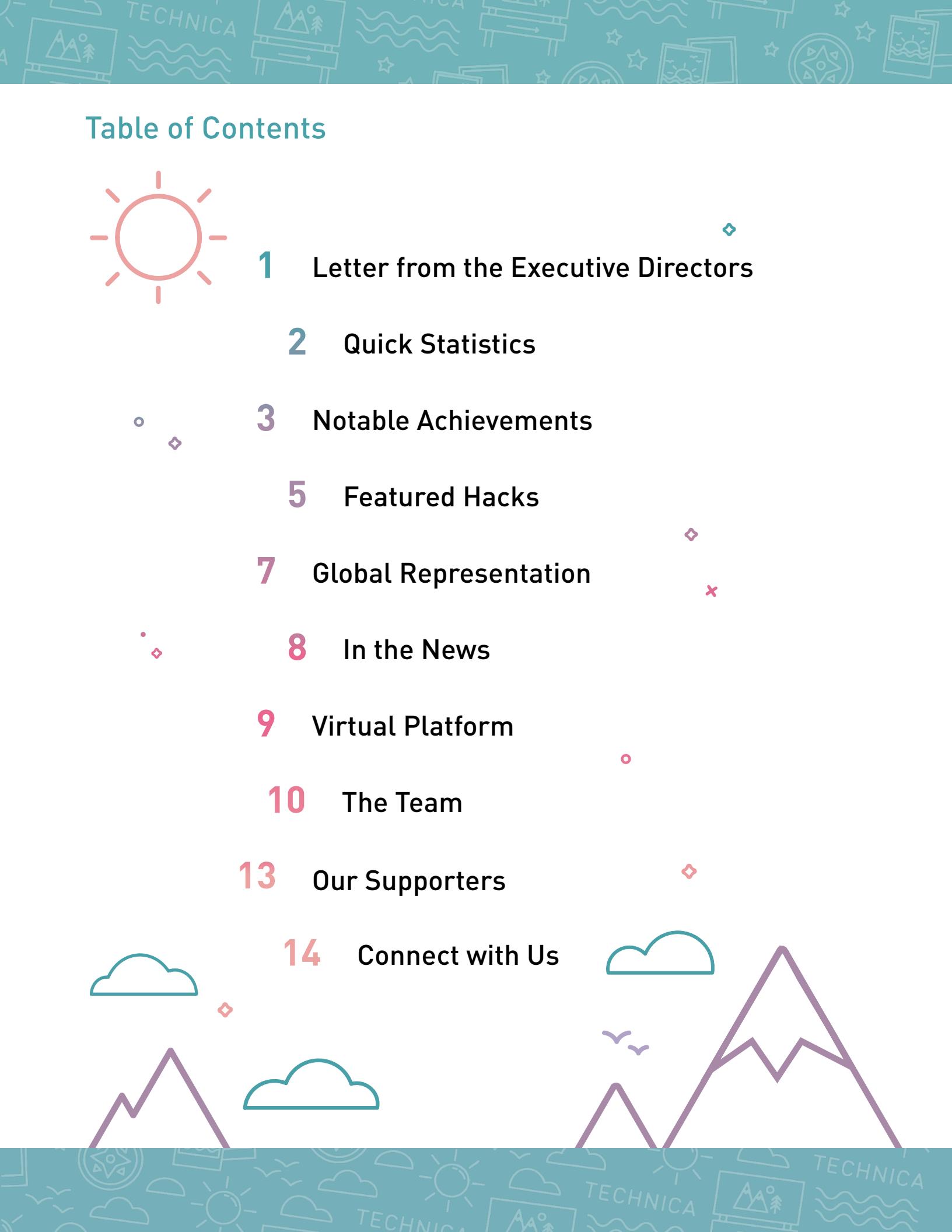
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Letter from the Executive Directors

The Technica community has come a long way. Our rapid growth has led to our team making significant progress in the space of gender equality in tech. However, we realize that there is still a ways to go before we reach true gender parity.

This is why we strive to create a safe, diverse, and inclusive community for underrepresented genders each year. Technica aims to provide resources for marginalized groups, allowing everyone an equal opportunity to pursue a future in tech.

2020 has been an unprecedented year in every way and Technica 2020 was no exception — leading to our first ever virtual event. Despite the challenges that came along with hosting an online hackathon, our team embraced this opportunity to grow and innovate. We built a state of the art in-house platform and introduced two tracks for beginners and hardware enthusiasts alike. This year we also doubled our attendance, hosting 1868 hackers from across 45 US states, 36 countries, and 6 different continents, resulting in the most inclusive and accessible Technica yet!

Our annual report keeps a public record of our efforts and accomplishments, while also recognizing the hard work that goes into each iteration of Technica. It also gives us the opportunity to show our appreciation for our hackers, sponsors, mentors, volunteers, student organizers, and alumni and their countless contributions to the Technica family. It truly takes a village, and we deeply thank you all for your unequivocal belief in the mission.

We hope you left Technica inspired, emboldened, and excited to continue to explore the possibilities of the tech sphere! We look forward to seeing you next year.

Warmly,
Gesna, Renee, and the Technica 2020 Team

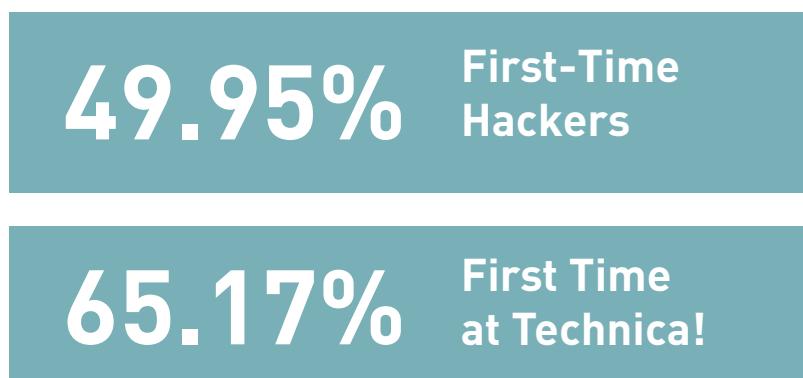


Gesna Aggarwal
Co-Executive Director

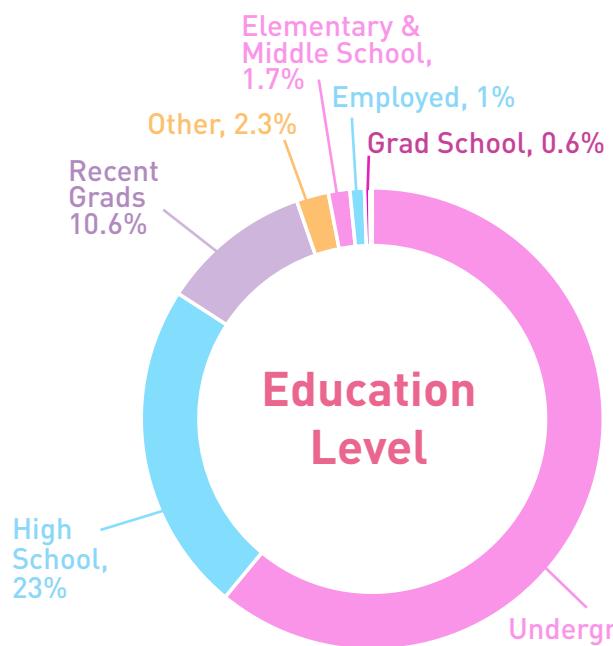
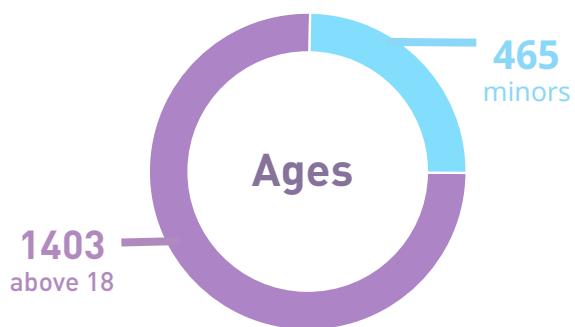


Renee Yang
Co-Executive Director

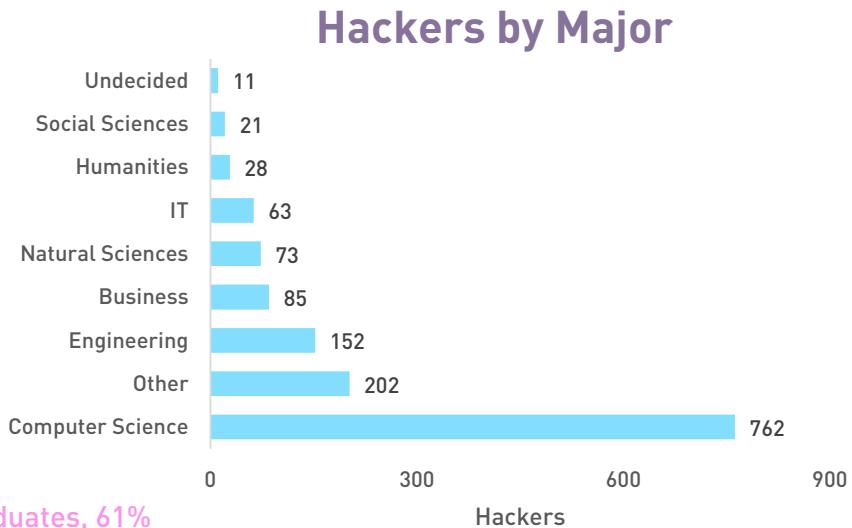
Quick Statistics



Hacker Demographics



Education



Notable Achievements

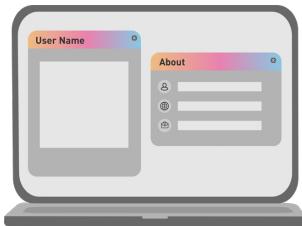


Hackers from 6 Continents

Technica 2020 focused on expanding horizons. Going virtual allowed us to expand Technica's horizons to welcome hackers from 6 continents. For the first time, Technica had representation from all over the globe. Some hackers were able to share their cultures through song and dance at our Open Mic Night event.

Upholding the World Record

Last year, we broke our own world record as the largest all-women and non-binary hackathon in the world. This year, we built upon this feat by welcoming 1868 total hackers onto our custom-built platform: a ~1000 participant increase from our previous total. In the process, we also became UMD's largest hackathon.



In-house Hackathon Platform

Our tech team developed a platform to ensure hackers, sponsors, and mentors a smooth, unified Technica experience. Organizers prototyped, debugged, and iterated over many months before deploying the platform featuring integrated video chatting links, team formation features, help for attendees, schedule highlights, and a passport system.

Speakers

Opening speaker Jewel Burks heads Google for Startups in the United States. She graduated from Howard University later founding Partpic, a startup acquired by Amazon. Jewel advocates for underrepresented communities as Managing Partner at Collab Capital and reImagine:ATL board member.

Our closing speaker, Cadran Cowansage, founded Elpha, a community providing resources to women in tech.



Notable Achievements: Tracks

Beginner

This year, we strove to better support beginner hackers by pioneering our Beginners Track. This track was designed to provide beginners with additional resources, ideas, and techniques to help them be successful at Technica and beyond. We provided support for 61 beginner hackers from around the globe to expand their horizons and connect with each other.



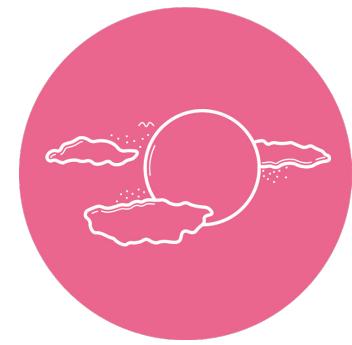
Hardware

The hardware track was launched this year, and it exposed 31 participants to the hardware side of computer engineering. We aimed towards making this track as approachable as possible and designed it with attention for beginners with minimal to no experience in hardware. Inspired by the effectively accessible Arduino technology, we sent our participants Arduino developer kits with the necessary beginner components and provided supplemental materials to help them get started. Participants were encouraged to incorporate different components in their unique and relevant hacks in order to demonstrate a higher-level understanding of an electronic system.



Tech + Research

Tech + Research surpassed its previous years' record, with more than 80 participants this year. During the 3-day workshop, participants worked alongside incredible research faculty and mentors, creating comprehensive research projects. The track provided hackers with long-lasting connections and great knowledge of research in tech.



Featured Hacks



We gave away

\$43,410

In prizes this year!

Total
Projects Submitted

215

Total
Prize Categories

23

of Participants that
Submitted a Hack

854

A few of our favorite winning hacks...

WaqiBot

Best Data Visualization Tool - Qualtrics

#hackislamophobia - Fifth Tribe/America Indivisible

WaqiBot is a social justice warrior that fights Islamophobia in realtime in Discord servers utilizing machine learning. It also combats Islamic misconceptions by teaching users about the Qu'ran.

Healthline

Best Global Health Hack - Abt Associates

Healthline provides a plethora of useful resources for health care workers such as discussion forums for workers to connect with one another, real time live updates on COVID-19 cases around their area and on an international scale, and mental health resources. Healthline is a mobile application created using ReactNative to provide resources for workers in developing areas.

Featured Hacks

A few of our favorite winning hacks...

Cyan

Best Hack to Build a "Smart" Tech Hub Ecosystem - M&T Bank

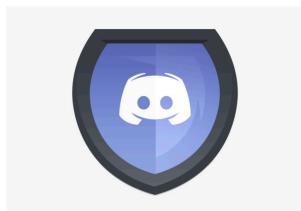
Cyan is an inclusive and health-conscious, chrome browser extension targeted at users who spend a maximum amount of time in front of their computer screens. It leverages the power of machine learning to monitor a user's posture in real-time while also providing contextual feedback and corrective measures.

Min

Best Hardware Track Hack

Hacker Jiamin Deng built the Min instrument using an Arduino board, ultrasonic sensor, and buzzer. Inspired by the instrument theremin, min sounds different notes depending on the users distance to the sensor. Checkout her musical hack [here](#).

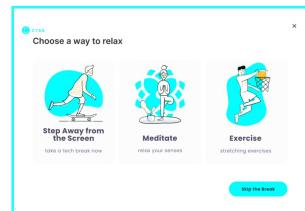
Devpost Gallery



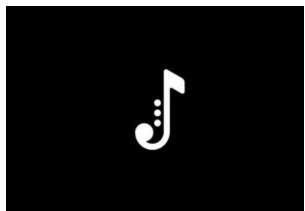
WaqiBot



Healthline



Cyan



Min



JAAN



Convertify

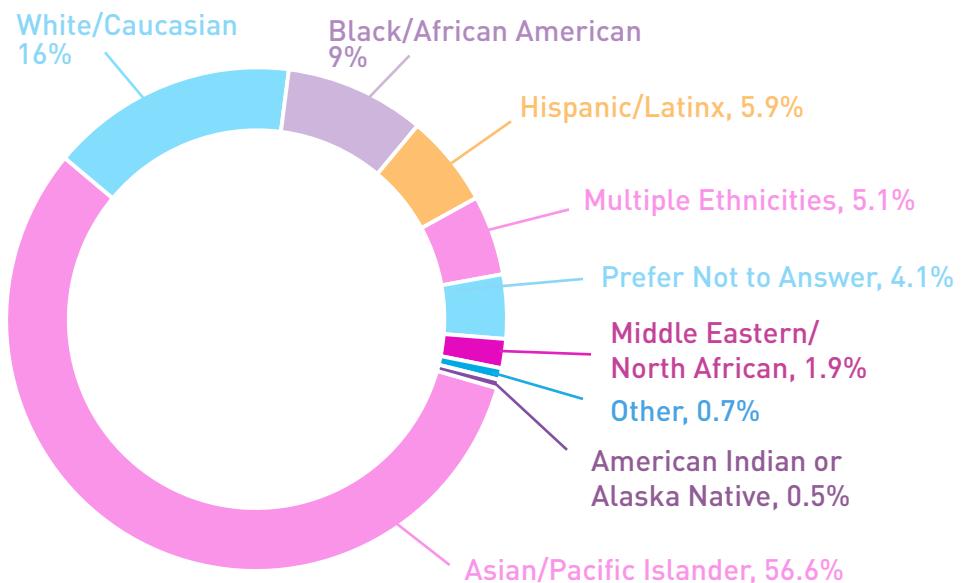


Smile.y

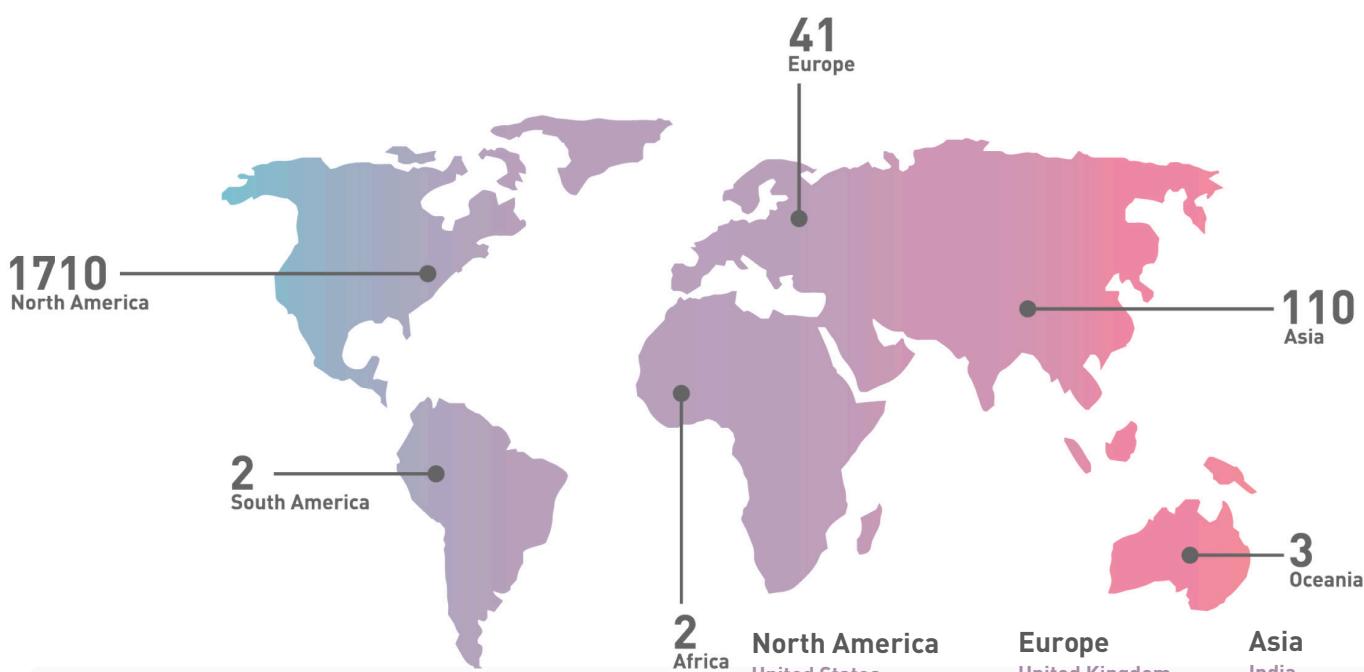


Visit our Devpost

Global Representation



Race & Ethnicity



Hackers from 6 Continents!

In The News



Technica Broadens Its Horizons

"The online format hasn't seemed to hinder the enthusiasm of participants who have registered in record-high numbers. Nearly 2,700 people have signed up to participate, roughly tripling attendance in a normal year." — Maryland Today



Technica channels inclusivity in virtual hackathon for women and non-binary students

"Far from putting a damper on festivities, though, moving online allowed the competition to balloon in size, even further expanding from last year."

— The Diamondback



Technica 2020 Empowers Women Virtually

"In addition to juggling the switch to a virtual platform, Technica is adding two new tracks for this year's event — one for hardware-based projects and one for beginners. The beginner track is a way for first-time hackers, who made up about 80% of Technica 2019's attendance, to "meet each other in a smaller group settings"

— Her Campus

Virtual Platform

Our unprecedented shift to a completely virtual event format this year also necessitated unprecedented technology challenges. We evaluated many existing online venue services when planning our event this year, and ultimately concluded that using a pre-built system would drastically diminish the standard of the event since they're not made for hackathons. Instead, we made the bold decision to build our own custom event platform from scratch to support our event and ensure that participants would still experience the magic of Technica despite the virtual format.

The Technica virtual platform leverages multiple best-in-breed technology solutions in order to provide a world-class virtual event experience for all attendees. These include an intuitive registration and login system, an embedded schedule, and support for dozens of amazing virtual workshops, games, and meetups. The platform also provides dozens of completely custom, hackathon-specific features that delight hackers, such as seamless mentorship request functionality, a custom sponsorship fair, and dedicated virtual spaces for hackers to collaborate with their team.

The Technica platform was able to support thousands of hackers, mentors, sponsors, and other attendees this year, in order to ensure they had an outstanding experience throughout the entire weekend. Our platform is completely open-source and will be generally available soon for other hackathons and organizations to use. To learn more about the platform or to use it for your hackathon, please reach out to tech@gotechnica.org.

The screenshot shows the Technica virtual platform homepage. At the top, there are navigation links: Home, Events, Hack, Social, Resources, and Profile. Below the navigation, there are two main sections: "HELPFUL LINKS" and "ANNOUNCEMENTS". The "HELPFUL LINKS" section includes links to "Learn About the Technica Platform", "Join the Conversation on Slack", "Useful Resources for Your Hack", and "Get In Touch With An Organizer". The "ANNOUNCEMENTS" section includes a link to a live stream for the closing ceremony and a welcome message for the weekend. At the bottom, there is a "SCHEDULE HIGHLIGHTS" section showing three events: "Technica 101" (11:00 am - 11:30 am Saturday), "Blockchain Governance" (12:30 pm - 1:15 pm Saturday), and "Importance of Building Equitable Tech" (3:00 pm - 4:15 pm Saturday). Each event has a "More info" button.



gotechnica.org/github

The Team



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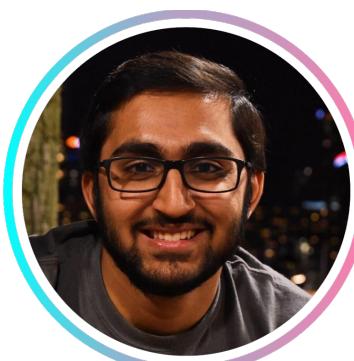
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The Team



TECHNICA

TECHNICA

Our Supporters



Connect with Us



Every Donation Counts

Individual contributions also make a huge impact — we appreciate all levels of support!

\$20

The cost to provide electricity and internet to a hacker, so they can stay charged up and logged in all weekend

\$10

The cost of each meal we provide to hackers at Technica, keeping them fueled and properly fed

\$5

The cost per hacker to keep Emergency Medical Services and Security Personnel on hand throughout Technica weekend, just in case