

TABLE OF CONTENTS

Introduction

Leadership Letter

5 Introducing FIRST® CEO Chris Moore

FIRST Longitudinal Impact Study

FIRST Progression of Programs

FIRST® LEGO® League Discover Spotlight

Inspired by FIRST: Meet These Community Game Changers

2020-2021 Season Highlights

20 FIRST® LEGO® League

FIRST® Tech Challenge

FIRST® Robotics Competition

Sponsors and Contributors

Thank You to our Retiring Long-time Board Members 32

FIRST Scholarship Program

33 **Program Delivery Partners**

34 Volunteers of the Year

36 Woodie Flowers Award

> 37 Financials

38 Leadership

ON THE COVER: FIRST ALUM APARNA RAJESH

FIRST alum Aparna Rajesh is the former co-captain of all-girls FIRST Tech Challenge Team 11306 "Prototype G" in Princeton, N.J. In the cover photo, she is participating at the 2019 FIRST Championship Detroit as an "honorary member" of FIRST Tech Challenge Winning Alliance Team 9971 "LANBROS."

Aparna is now studying computer science with a concentration in artificial intelligence and machine learning at the Stevens Institute of Technology. She is also a software developer and undergraduate research affiliate for Massachusetts Institute of Technology, working on a mission for NASA's CubeSat Launch Initiative." She pays it forward by volunteering for FIRST.

"FIRST was life-changing for me. It helped me pick up technical skills and identify my passion for software development, as well as helping me build teamwork, leadership, and presentation skills. As a FIRST mentor, I hope that I can help other students find a passion for STEM."

With the incredible support of mentors, educators, volunteers, sponsors, donors, and alumni, FIRST® inspires young people to go on to better our world. That inspiration comes from our community ethos of Gracious Professionalism® and Coopertition® and the FIRST Core Values of discovery. innovation, impact, inclusion, teamwork, and fun.

As part of FIRST, we're building a culture around the Sport for the Mind.™ We know that when we participate in any sport, we use our creativity, imagination, and critical thinking as much as we use our muscles. We create inspiration when we champion the strengths of every person who plays the game and gives us a reason to cheer.

During our game-changing year, we adapted our evidence-based robotics and innovation challenges to meet our youth participants where they **needed us** – whether in person or in remote learning environments. As we cheered them on from the virtual bleachers, we were also inspired by the game-changing ways they innovated and impacted their own communities.

Together, we are FIRST GAME CHANGERS.





Leadership Letter

Since FIRST was founded in 1989, we've reached more than 2.5 million young people with our programs through their schools and communities around the world

During the first year of the COVID-19 pandemic, 1 in 7 children globally* lost more than three-quarters of their in-person learning. This had unavoidable impacts on student access to programs like FIRST that are interwoven into the school experience in classrooms and after school.

For the 2020-2021 season, we needed to do everything in our power to sustain our community and mission during this challenging period, one that's shown just how important scientists and innovators are to building a better future.

Our season theme, FIRST® GAME CHANGERSSM powered by Star Wars: Force for Change, was selected before the pandemic hit, but it foreshadowed what our focus would be throughout the season: changing the game so as many participants as possible could still get in the game (see page 18).

We rolled out program modifications, new remoteonly activities, remote and hybrid event solutions, and supporting tools and services. This year, we also focused on expanding our equity, diversity, and inclusion (ED&I) capacity by adding an ED&I director to the executive leadership team, facilitating monthly staff trainings, bolstering our volunteer resources, and expanding our partnerships.

Our season theme and this report celebrate our inspiring "FIRST game changers" – the individuals and teams who innovate to make an impact in their communities. They supported needs from personal protective equipment (PPE) shortages to science, technology, engineering, and math (STEM) education access (see page 14).

To our organization, the most inspiring FIRST game changers were our supporters. We are overwhelmingly grateful for the incredible support and collaboration we received from our sponsors, donors, volunteers, mentors, educators, alumni, parents, and others new and returning to the FIRST community.

Together, despite the challenges, we continued to make exciting progress this year in growing our ability to deliver our mission.

- → Our FIRST LEGO League Discover division for young learners ages 4-6, piloted in 2019, continued to experience growth, and in our year 3 evaluation, teachers noted positive student outcomes in core program areas including teamwork, STEM literacy, and social-emotional learning (see page 12).
- + Seven years into our cross-program longitudinal impact study, FIRST participants and alumni continue to show lasting impact in STEM outcomes, with girls in FIRST reporting the largest difference in outcomes compared to their peers (see page 8).
- + The 2021 Christa McAuliffe Silver Dollar, a U.S. coin recognizing a STEM education hero advocated for by the FIRST community, was issued featuring the FIRST logo.
- + We expanded our leadership bench to continue growing our global movement, adding to our Board of Directors (including a FIRST alum, see page 16), hiring Dr. Janell N. Catlin as ED&I Director, and creating new Chief Executive Officer (see sidebar) and Chief Operating Officer roles on the FIRST leadership team (see page 38).

We also express our sincere gratitude to retiring FIRST Board of Directors members Bob Tuttle and Walt Havenstein for their decades of leadership and service to our mission (see page 24).

As part of this *FIRST* community, your support enabled us to adapt aggressively to meet our community's pressing needs while preserving our infrastructure – putting FIRST on strong footing to move into the recovery ahead and beyond to making our programs available in every school and community and accessible for every student. Thank you.

Chris Rake. Executive VP and Chief Operating Officer, FIRST Co-Chair, FIRST Board of Directors

Dean Kamen Founder, FIRST



Introducing FIRST CEO **Chris Moore**

Chris Moore joined FIRST in November 2021 as chief executive officer (CEO), bringing visionary leadership, extensive advocacy and field-engagement experience, as well as deep experience in youth development and a passion for building programs that serve youth, families, and communities. Before ioining FIRST. Chris served as CEO of Positive Coaching Alliance and the United States Youth Soccer Association, where he increased youth participation in recreational and competitive soccer programs nationwide.

"I'm honored to join an organization with such an impressive legacy of changing lives. FIRST is a Sport for the Mind, and today, it is more relevant than ever. We are poised to be the solution to challenges facing communities around the world." - Chris Moore, FIRST CEO

Research shows FIRST® drives STEM engagement and outcomes

Research from a multi-year longitudinal study shows *FIRST* is advancing its mission to increase the number of students interested in STEM — and that interest is influencing their educational and career choices. **Detailed information can be found at <u>www.firstinspires.org/impact</u>**

FIRST students are prepared for greater success in the classroom and workforce.

At *FIRST*, we understand that interest, rather than academic proficiency, is a greater predictor of children pursuing studies and careers in STEM fields. Our evidence-based programs use strategies known to increase student interest and engagement in science, technology, engineering, and math (STEM), including:













CULMINATING CELEBRATION WHERE STUDENTS CAN SHOWCASE WHAT THEY CREATED AND LEARNED

Gains in Workforce Skills

FIRST participants show significant gains in workforce skills such as teamwork, communication, and problem-solving.

"FIRST has given me life skills and tools to work well with others and be a team player and always do my personal best with Gracious Professionalism." These are skills I will use in my daily life and beyond!"

Longitudinal study participant

Research highlights

Benefits of FIRST

FIRST students are two times more likely to show an increase in STEMrelated attitudes and interests than comparison group students.

Positive impacts are evident for all FIRST students regardless of race, gender, income, or community type.



FIRST STUDENTS ARE SIGNIFICANTLY MORE LIKELY TO SHOW GAINS IN STEM OUTCOMES THAN COMPARISON STUDENTS



STEM Interest STEM Career Interest STEM Knowledge STEM Activity STEM Identity



FIRST Alumni

By their fourth year of college, FIRST alumni are more likely to be majoring in STEM fields and taking STEM courses than comparison group peers.

DECLARE A MAJOR IN STEM

FIRST ALUMNI

81%

COMPARISON GROUP

58%

DECLARE A MAJOR IN ENGINEERING OR COMPUTER SCIENCE

FIRST ALUMNI

68%

COMPARISON GROUP

MORE LIKELY TO TAKE COURSES IN ENGINEERING OR COMPUTER SCIENCE

FIRST students are 2.5 times more likely to take engineering courses and 3.2 times more likely to take computer science courses their fourth year of college than the comparison group.

3.2x

Computer Science



Engineering



Research shows FIRST has a lasting impact on girls and young women

Women are critical to the advancement of STEM – but a significant gender gap remains within STEM careers. At *FIRST*, we are actively developing ways to address barriers to access and participation, particularly in managing and allocating resources, programs, and educational opportunities fairly to all genders. We are committed to creating a diverse, inclusive, and equitable community for all participants.

Girls in *FIRST* see amazing impacts. All *FIRST* participants are significantly more likely to have stronger STEM outcomes compared to their classmates, as evidenced by the *FIRST* Longitudinal Study. However, girls in *FIRST* report the largest differences in STEM outcomes over time when compared to their female peers, and higher than boys.



Women in FIRST

Young women in *FIRST* have significant gains in all STEM areas — including STEM interest, career interest, activity, knowledge, and identity — compared to young women in the comparison group.

DECLARE A MAJOR IN ENGINEERING OR COMPUTER SCIENCE

FEMALE FIRST ALUMNI

51%

FEMALE COMPARISON GROUP

16%

MORE LIKELY TO TAKE COURSES IN ENGINEERING OR COMPUTER SCIENCE

3.4x

Computer Science

2.6x

Engineering

STEM Outcomes

Female *FIRST* participants are 2.2 times more likely to have significantly stronger STEM interest than comparison group peers, and:

MORE LIKELY TO HAVE SIGNIFICANTLY STRONGER OUTCOMES IN STEM ATTITUDES, KNOWLEDGE, AND INTERESTS COMPARED TO THEIR PEERS

3.2x

STEM Activity

2.1x

STEM Knowledge

1.4x

STEM Identity

2.2x

STEM Interest

1.9x

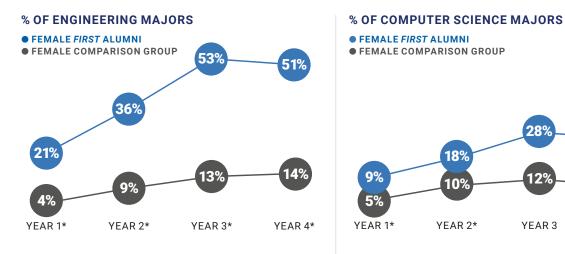
STEM Careers



2021 Annual Impact Report

Declare STEM Majors

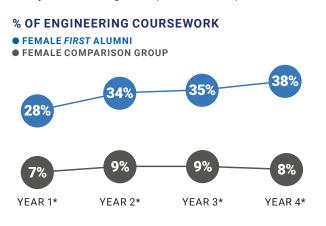
More female FIRST alumni declare majors in Engineering and Computer Science compared to young women in the comparison group.





Take STEM Coursework

Female FIRST alumni are more likely to take coursework in Engineering or Computer Science each of the four years of college compared to their peers.



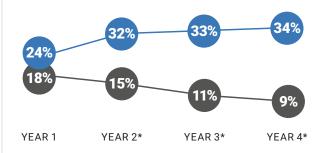


YEAR 3

YEAR 4

• FEMALE FIRST ALUMNI

FEMALE COMPARISON GROUP



"FIRST has made such a large impact on my life that I don't know where or who I would be without it. I have been involved with FIRST for seven years, and the experiences that I have had have given me public speaking skills, confidence in my abilities, and life-long friendships. FIRST also has given me the opportunity to inspire others in STEAM fields."

Longitudinal study participant

Detailed information can be found at www.firstinspires.org/impact

FIRST Progression of Programs

A Suite of Hands-On, STEM Learning Programs

FIRST combines the rigor of STEM learning with the fun and excitement of traditional sports and the inspiration that comes from community through a progression of programs that have a proven impact on learning, interest, and skill-building inside and outside of the classroom.

"I would like to thank the FIRST organization. You've played a vital role in helping shape the outstandingly positive direction of [my son's] path. FIRST's mission, vision, and Core Values have bolstered the development of my son's character and, accordingly, exponentially increased his opportunities. Thank you to all the beautiful volunteers who help make FIRST a powerfully impactful opportunity for many young people like my son." - FIRST parent and donor

FIRST® LEGO® League Divisions

FIRST® LEGO® League guides youth through STEM learning and exploration at an early age. From Discover to Explore and then to Challenge, students will understand the basics of STEM and apply their skills in an exciting competition while gaining productive learning habits, confidence, and teamwork skills along the way.



AGES 4-6 GRADES PreK-1

FIRST LEGO LEAGUE DISCOVER

This playful introductory STEM program ignites children's natural curiosity and builds their habits of learning with hands-on activities in the classroom and at home using LEGO® DUPLO® bricks.



AGES 6-10 GRADES 2-4

FIRST LEGO LEAGUE EXPLORE

Teams of students focus on the fundamentals of engineering as they explore real-world problems, learn to design and code, and create unique solutions made with LEGO bricks and powered by LEGO® Education SPIKE™ Essential or WeDo 2.0.



AGES 9-16* GRADES 4-8

FIRST LEGO LEAGUE CHALLENGE

Teams of students engage in research, problem solving, coding, and engineering – building and programming a LEGO® Education SPIKE™ Prime or LEGO® MINDSTORMS® robot that navigates the missions of a robot game. They also participate in the Innovation Project to identify and solve a relevant real-world problem. *Ages vary by country

Grades PreK-8 · Ages 4-16*



Young Innovators Use Skills and **Imagination to Solve Problems as a Team**

THE CHALLENGE

Through a guided, global robotics program, students are introduced to STEM learning and exploration at an early age. Children can begin with Discover (ages 4-6) and progress through Explore (ages 6-10) and Challenge (ages 9-16*), or join at any division based on their age or grade level.

THE JOURNEY

Young children are introduced to STEM concepts and develop habits of learning through engaging, fun challenges using LEGO Education materials, with opportunities to show their skills through festivals and competitions.

THE OUTCOME

Students gain real-world problem-solving experiences that inspire them to experiment and grow their critical thinking, coding, and design skills while building confidence, growing their knowledge, and developing habits of learning.

*Ages vary by division and country

Grades 7-12 · Ages 12-18



It's Way More Than **Building Robots**

THE CHALLENGE

Teams of students design, build, program, and operate Android-smartphone-controlled robots to compete head-to-head in an alliance format. Students are encouraged to create a team identity and be an ambassador for FIRST and STFM in their communities.

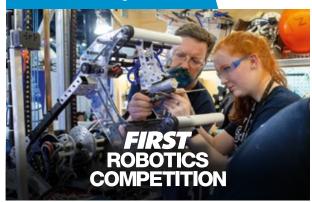
THE JOURNEY

Teams compete at local and regional events, qualifying up to the FIRST Championship. They earn awards based on their teamwork, creativity, innovation, and the engineering design process.

THE OUTCOME

While developing their STEM skills and mastering engineering principles, students learn the value of persistence, innovation, teamwork, and the engineering design process. Current and past participants can apply for scholarships from FIRST Scholarship Providers and participate in additional career discovery opportunities.

Grades 9-12 · Ages 14-18



An Exciting Sport Built Around the World of STEM

THE CHALLENGE

Under strict rules, with limited time and resources, high school teams use sophisticated technology to build and program industrial-size robots for a challenging field game. Each team creates a team identity, raises funds to meet its goals, and works to promote STEM in the local community.

THE JOURNEY

At district and regional events, cheering crowds root for qualifying teams as students compete with their robots for prestigious awards and a coveted spot at the FIRST Championship.

THE OUTCOME

As students learn real-world engineering concepts, they build their confidence and workforce skills and connect with professional team mentors and sponsors who can help them succeed. Current and past participants can apply for scholarships from FIRST Scholarship Providers and participate in additional career discovery opportunities.

Spotlight on FIRST® LEGO® League Discover



Discover Ignites Early Childhood STEM Engagement and Builds Habits of Learning

Building habits of learning in children early is critical to developing lifelong interest in STEM learning. With development support from the LEGO Foundation, FIRST piloted a new FIRST LEGO League division in 2019 and officially launched FIRST LEGO League Discover in 2020, expanding FIRST programming to reach children as young as 4.

The FIRST LEGO League divisions (see page 10) guide young children through STEM learning and exploration at an early age. Designed for children ages 4-6, Discover ignites their natural curiosity and builds their habits of learning with hands-on activities in the classroom and at home using LEGO® DUPLO® bricks, including the LEGO Education STEAM Park Set, to grow their understanding of gears, motion, measurement, and solving problems together, and themed Discover Sets that help children explore how STEM relates to their world.

Discover is implemented through FIRST Class Packs, which provide facilitators with the tools and resources to lead early learners through 10 sessions and a culminating event celebration as they explore STEM through creative play. Children record what they learn in an Engineering Notebook and take home Discover More Family Engagement Sets to extend and reinforce their habits of learning with family at home.

Discover Impact: Key Findings

Since Discover launched, a global pandemic interrupted access to STEM learning, and yet Discover experienced continued global growth and demand among early childhood education programs. Through generous sponsorship from the LEGO Foundation. FIRST reached 32.107 youth world-wide between 2018-2021.

A three-year evaluation* of FIRST LEGO League Discover conducted by WestEd shows strong findings from teachers and facilitators, who note positive student outcomes in core FIRST program areas including STEM literacy and socialemotional learning:

- + Almost all teachers reported that Discover meets the needs of students academically, socially, and emotionally.
- + Teachers noted positive student outcomes in social-emotional learning, including gains in self-awareness, self-regulation, cooperation, positive interactions with peers, responsibility, and empathy.
- + 92% of teachers reported that students had gains in STEM literacy, use of STEM vocabulary, and emerging understanding of the engineering design process.
- + Teachers noted that Discover meets the diverse needs of their students. Students with learning differences were engaged and had positive outcomes. Hands-on learning with little reliance on written words makes Discover accessible to those with language needs.
- + Teachers reported gains in their ability to effectively teach STEM to young learners. including recognizing the importance of handson learning and feeling more confident to teach STEM by the end of Discover.





Discover in Action in México

When FIRST asked leaders from RobotiX, the FIRST LEGO League partner for México, to help pilot its new early childhood STEM program, they eagerly agreed. "We were so enthusiastic about the potential to impact children at early learning ages," Roberto Saint Martin S., director of RobotiX, said.

Three years of Discover grant funding from the LEGO Foundation has enabled RobotiX to reach more than 12,500 students, mostly ages 5-6 and 50% girls, across several states in México through preschools and childcare centers, focusing on vulnerable sites that reach children in difficult economic situations or with disabilities. Roberto says teachers are impressed by how much their students' vocabularies grow through Discover's real-world theme and sessions, and observed the young children becoming more tolerant with each other and able to work as a team.

Discover's impact has been noticed by parents too; often those without access pressure the schools to increase Discover enrollment. Many sites have been able to share the materials to reach more children. with RobotiX providing best practices on how to ensure every child gets the whole Discover experience. "Resources are scarce in México, so when they get these opportunities, schools want every child to have it because it's so enriching," Roberto said.



Demand from families and schools has grown each year, even as the pandemic closed many of México's public schools to in-class learning. "It's great proof that Discover is an incredibly scalable program that could have greater impacts for education," Roberto said, crediting the multi-year grant funding for making it possible to track program impact and develop strategies for sustainability. "With this grant, we're able to pilot these programs and show it's possible to invest in them, and we're seeing more change coming through the schools as a result."

"The community to which our students belong has serious economic problems, so the implementation of the program was a great opportunity for the children and their families. [Discover] has contributed a lot to the family union, to the development of cognitive skills and creativity of the students. Through the sessions, we saw all the learning that the students developed."

- Discover grant recipient, Jardín de Niños El Barquito, Sonora, México



Inspired by FIRST: Meet These Community Game Changers

Amidst an ongoing global pandemic, our community not only upheld the FIRST Core Values (see below), but also continued to innovate and change the game to make an impact in their backyards and on a global scale. These stories of FIRST students and alumni are just a sample of the thousands in our community worldwide that exemplify what it means to be a game changer.

FIRST Core Values We express the FIRST philosophies of Gracious Professionalism® and Coopertition® through our Core Values:

DISCOVERY We explore new skills and ideas.

INNOVATION We use creativity and persistence to solve problems.

IMPACT We apply what we learn to improve our world.

INCLUSION We respect each other and embrace our differences.

TEAMWORK We are stronger when we work together.

FUN We enjoy and celebrate what we do!





FIRST Students Rise to the PPE Challenge

When the COVID pandemic began and the 2019-2020 season came to a halt, the FIRST community immediately leapt into action. Students switched gears from robot building to personal protective equipment (PPE) production and community outreach. The FIRST in Michigan community swiftly began the "1 Million PPE Challenge" to assist healthcare professionals and first responders in getting the proper protection needed to fight COVID-19. Students across the United States banded together (virtually) from their homes and team workshops to produce and donate over 2.2 million pieces of PPE, including face shields, face masks and accessories, and safety glasses.

One of the students who contributed, Angelica Whitney, a FIRST Tech Challenge participant from New Hampshire, created more than 7,000 pieces of PPE for healthcare facilities, nursing homes, and others, using her team's 3-D printers and the fundraising skills she honed over seven years in FIRST. "I really wanted to make a difference in my community," she said.

As the pandemic lingers, FIRST teams across all programs are continuing to use their resources to meet the needs of their local communities and proving their infallible resilience as they navigate these challenging times as a collective community.

Affinity Group "LGBTQ+ of FIRST" Fosters Inclusive Community

As part of celebrating 2021 Pride Month (see page 19), FIRST teamed up with a student-run affinity group to amplify the voices and experiences of lesbian, gay, bisexual, transgender, and queer (LGBTQ+) members within our community. LGBTQ+ of FIRST seeks to create a safe and educated space for students, mentors, and volunteers through outreach events and educational resources. Their stories, told through a blog series, helped us highlight important LGBTQ+ topics during Pride Month, including how to support FIRST students coming out, how to be a positive ally, and advice for LGBTQ+ students dealing with resistance towards acceptance.

Eva, a FIRST alum from Indiana who has participated in and mentored seven FIRST teams, wrote about finding her identity while founding Neurodivergent of FIRST and joining LGBTQ+ of FIRST. "My lifeline through this time was FIRST, including LGBTQ+ of FIRST. It was somewhere to be myself without fear. It was somewhere to meet people like me who also shared my love of robots. It was somewhere safe," she said.

Through Pride Month discussions and ongoing inclusion efforts, LGBTO+ of FIRST works within the FIRST community to express the importance of listening to varying perspectives from LGBTQ+ people, working to understand different identities, and advocating for LGBTQ+ rights.





PickUp Patrol: From Student Innovation to Global App

In 2009, FIRST LEGO League team "NXTreme" from Mont Vernon, N.H., addressed transportation problems within their community as part of their Innovation Project during the SMART MOVE season. Twelve years later, that project is now known as PickUp Patrol: a school dismissal app that is used in three countries. 36 states, and countless schools. helping educators and parents coordinate dismissals.

FIRST alum Tony Edvalson (second from left), an original member of the elementary school team behind the groundbreaking app, now works full time for PickUp Patrol as a software engineer. "Working at PickUp Patrol has been incredibly rewarding," said Edvalson. "Developing an idea from scratch and seeing it succeed has taught me a lot about how to build a product and manage it."

PickUp Patrol's core product is still intact today, with additional features to address the changing needs of schools during the ongoing COVID pandemic. "Learning about innovation at a young age has had a huge impact on my life," Edvalson continued. "It has given me the confidence to come up with new ideas and share them with others "

FIRST Alum Elected to Board of Directors

Dr. Melissa Smith, FIRST alum and staff user experience researcher at Google/YouTube, knows a thing or two about changing the game. She is the first FIRST alum on the FIRST Board of Directors, having participated as a student and actively volunteered in various roles for over 20 years. Outside of her career at Google, where she is leading research to improve the artist and industry experience across YouTube's various surfaces, she continues to pay the FIRST mission forward: Melissa volunteers her time as a head referee and on the Greater San Francisco Region Planning Committee. "I think it's important for FIRST alumni to give back to FIRST. however they can, as we can all attest to the positive impact this program had on our lives and our journeys," said Smith. "Helping to ensure FIRST can be there for the next generation of students is part of the journey."



"LAUNCH TEAM 6352" Helps Make STEM More Accessible

FIRST Robotics Competition team "LAUNCH TEAM 6352" has engaged over 100 students in their community using FIRST @ Home activities. Within the FIRST @ Home offerings, there are activities for every age group, and LAUNCH TEAM appreciated having this breadth of materials so that every student who wanted the experience could participate remotely. "We really wanted to make sure that the kids were having fun, and they were encouraged to use their creativity," said LAUNCH TEAM president Noel Robertson. "We didn't want it to feel like homework"

After seeing the impact they made in their own community, LAUNCH TEAM hopes to inspire others to host similar projects in their communities. To make resources available to even more students, LAUNCH TEAM worked with the FIRST Education team to create Google Classroom lessons for the FIRST LEGO League RePLAYSM season.



All-Girls Libyan Teams Promote Gender Equality

Team "LYBOTICS Change" – the first all-girls FIRST Tech Challenge team in Libya – is changing perceptions and breaking down barriers for women and girls. Amidst staggering civil unrest in Libya, the broader LYBOTICS organization has created a safe place for children of all ages to learn and have fun. Even more game changing, the LYBOTICS organization, which became a FIRST Tech Challenge partner in 2021, supports two all-girl robotics teams and several mixed gender teams – 10 years after the Libyan revolution in 2011, and during a time when Libyan women continue to fight for gender equality against very real threats to their lives.

Understandably, the girls' families were initially reluctant to let them join the robotics team, as their participation defies the social norms of Libya's deeply fragmented society. But with bravery and perseverance, the teams formed and have since empowered these young women to hone their skills and confidence as STEM leaders. For the first time, they can receive support from mentors and others they would not normally have access to and pursue higher education and careers in STEM fields. The girls are making waves of positive change in Libya, garnering support in their regions and on social media, and helping to evolve girls' and women's rights across the country.



FIRST® GAME CHANGERS™ powered by Star Wars: Force for Change

The FIRST GAME CHANGERS powered by Star Wars: Force for Change season theme challenged us to revolutionize the traditional world of sports and fitness and be game changers. Across our programs, we celebrated the evolution of our sports and activities that make us physically and mentally strong.

A Season in Numbers

318,000+

students impacted in 90 countries

139,000+

mentor, coach, judge, and volunteer roles

9.8+ million

volunteer hours served



GET IN THE GAME

With the global COVID-19 pandemic continuing throughout the 2020-2021 season, we set out to ensure that as many FIRST participants as possible could "get in the game" across learning environments through core program elements:



GAME PLAY

Fun. thematic robot game challenges to enhance engineering and teamwork skills



INNOVATION PROJECT

Real-world innovation projects designed to test problem-solving skills and make a community impact



CAREERS

Career exploration, mentorship, and scholarship opportunities for fostering personal and professional development



COMMUNITY

Young people, and the adults who mentor and support them, are part of our thriving, inclusive global robotics community



RECOGNITION

Opportunities to celebrate and be recognized for achievements

SEASON HIGHLIGHTS





The 2021 Christa McAuliffe Silver Dollar, a U.S. Mint coin commemorating the first teacher selected to go to space and featuring the FIRST logo, was presented to Dr. Jill Biden, First Lady of the United States and an educator, who called it "a tribute to all educators."

FIRST, with our sponsors, hosted virtual career discovery events for students and alumni on topics such as advancing equity and STEM in the sports industry, how robotics is being used across industries, and how to make the most of their FIRST experience.

The **FIRST Mentor Network presented by NI** launched with an interactive platform allowing teams and interested mentors to find each other.



FIRST partnered with Qualcomm to launch the 2021 FIRST Innovation Challenge presented by Qualcomm, which gave FIRST Tech Challenge and FIRST Robotics Competition teams a pathway to join FIRST LEGO League teams in advancing to the 2021 Global Innovation Awards presented by Star Wars: Force for Change. Cheddar News featured some of the teams and their health and fitness solutions in its "Young Innovators" series.





FIRST joined the **Human Rights Campaign's** Project THRIVE to reinforce our commitment to **inclusion** and the importance of allyship to support LGBTQ+ colleagues, mentors, volunteers, and student participants.

FIRST made free PreK-12 STEM engagement activities available for educators and parents on FIRST @ Home to support remote and hybrid learning environments.



Grades PreK-8 Ages 4-16*

Teams worked together to research and invent new ways and places for people of all abilities to play, move, and stay active. In **PLAYMAKERS**,[™] Discover and Explore students designed new obstacle courses and play structures, built a LEGO® model, and tracked what they learned in an Engineering Notebook. Explore teams brought their model to life using LEGO® Education WeDo 2.0. In RePLAY,SM Challenge teams identified and researched a problem related to people not being active enough, then designed a new piece of technology or improved an existing one to help solve it. They also built and programmed an autonomous LEGO robot to solve play and fitnessthemed missions on a competition field. Teams competed and shared what they learned at remote, hybrid, and in-person events. *Ages vary by division and country









FIRST LEGO League Challenge Global Innovation Award Winner

2021 WINNER Team "SESI Big Bang," Sao Paulo, Brazil **INNOVATION PROJECT FIGLOVE**

FIGLOVE is an innovative strip with an ultrasonic sensor placed in the palm of the hand that reduces pain during exercise – especially beneficial to people with fibromyalgia. SESI Big Bang is a FIRST LEGO League Challenge team of six students and two coaches hoping to make the world a better place through scientific and innovative solutions.

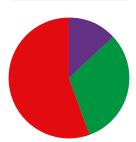
SEASON FACTS

216,480

students in 69 countries explored STEM concepts and gained real-world problem-solving experiences through the guided, global FIRST LEGO League program.

> 33,824 individual teams

> Class Packs and School Packs



28,464 Discover students

67.872 Explore students

120.144 Challenge students



Grades 7-12 · Ages 12-18

Teams challenged themselves to exceed their personal and team potentials and redefine the game. Students programmed their robots to compete in three minutes of game play with autonomous and driver-controlled sections through remote, hybrid, and in-person events. This exciting, fast-paced game incorporated tasks including delivering wobble goals to the correct randomized target zone, parking their robot on top of the launch line, and collecting and launching rings to score in various goals. This year, teams also had the opportunity to participate in the remote FIRST Innovation Challenge presented by Qualcomm.







FIRST Tech Challenge Global Innovation Award Winner

2021 WINNER Team 14725 "Java the Hutts," Fort Meyers, Florida FIRST INNOVATION CHALLENGE SOLUTION PATHWAYS

Java the Hutt's PATHWAYS mobility tool is an ultra-wideband (UWB) detector device with an integrated vibration motor module that attaches to the cane of a visually impaired user and forms a safe path. The small, hard-working team aims to build engineering skills and spread awareness of robotics and get more students involved with FIRST

SEASON FACTS

students in 42 countries developed STEM skills, practiced engineering principles, and explored the value of teamwork through FIRST Tech Challenge.

individual teams

Class Packs



Grades 9-12 Ages 14-18

FIRST Robotics Competition introduced three new team challenge opportunities with remote judging for students to develop skills from engineering design to business development this season, in lieu of the program's typical large in-person competitions: In INFINITE RECHARGESM at Home, teams demonstrated their robot's technical skills in a competition based on the 2020 INFINITE RECHARGE field game. The **Game Design Challenge** invited teams to design an original robotics game and compete for judged awards. The FIRST Innovation Challenge presented by Qualcomm challenged teams to explore the invention process by designing a health and fitness-themed innovation, creating a business model, and pitching their idea.







FIRST Robotics Competition Global Innovation Award Winner

2021 WINNER Team 5553 "Robo'Lyon," Rhone, France

FIRST INNOVATION CHALLENGE SOLUTION WALK ASSISTANT

Robo'Lyon, a FIRST Robotics Competition team of seven students, was inspired by their personal experiences with Parkinson's disease to create the Walk Assistant, a hands-free solution for patients with the nervous system disorder who develop a "freezing" symptom, a sudden inability to move that can lead to dangerous situations. The team uses the iterative Scrum method to make progress on their project.

SEASON FACTS

52,340

students in 30 countries unlocked real-world engineering concepts, self-confidence, and workforce skills, supported by professional team mentors and sponsors.

individual teams

rookie teams

Sponsors and Contributors

Through FIRST programs, kids of all ages and backgrounds are building pathways for their futures. As a nonprofit more than three decades into our mission, we know we would not have this impact without the support of our sponsors, suppliers, donors, and other financial contributors. Their partnership, acknowledged in part on these pages, enables our participants to have the tools they need to succeed and build a better world.

Together, we are changing the game.

2020-2021 STRATEGIC PARTNERS























































THANK YOU TO OUR RETIRING LONG-TIME BOARD MEMBERS

Robert M. Tuttle

SERVED 2002-2021 ON BOARD OF DIRECTORS

Bob Tuttle is one of our organization's earliest and most passionate supporters, willing to step in wherever his service is needed and instrumental to our growth. He has been a volunteer for FIRST since its early development more than 30 years ago, including 16 years as FIRST Board of Directors treasurer and eight years as co-chair, and he even served as interim president in 2005 and 2013.

Bob is a General Partner of 1848 Associates, a commercial real estate development entity. Prior to that, he held several executive positions for over 20 years in the aerospace industry before joining FIRST founder Dean Kamen as executive vice president of DEKA Research & Development Corporation.

FIRST extends our deepest thanks and appreciation for his visionary guidance, exceptional leadership, and unconditional commitment to FIRST



Walter P. Havenstein

SERVED 2006-2021 ON BOARD OF DIRECTORS

For 15 years, Walt Havenstein brought his leadership experience and engineering passion to the FIRST Board of Directors, including three years as Board chair and eight years as chair of its Audit Committee. Understanding the value of FIRST to industry, Walt originated the idea that FIRST is "the only sport where every kid can turn pro."

Walt is the retired chief executive officer of Science Applications International Corporation (SAIC). Prior to SAIC, Walt was president and chief executive officer of BAE Systems Inc., a FIRST Strategic Partner, and had a long career in the defense industry and in the U.S. Marine Corps.

FIRST shares our deepest thanks and appreciation for his invaluable leadership, outstanding dedication, and extraordinary service.



FIRST FOUNDING SPONSORS













Johnson Johnson







2020-2021 FIRST CONTRIBUTORS

CORPORATIONS AND **FOUNDATIONS**

\$1,000,000+

Amazon

Apple

The Argosy Foundation

The Boeing Company

DoD STEM

The LEGO Foundation

National Aeronautics and Space Administration (NASA)

Oualcomm Incorporated

Qualcomm Matching Gift Program .

Raytheon Technologies

The Walt Disney Company

Walt Disney Parks and Resorts Walt Disney Imagineering

\$250,000 - \$999,999

The 3M Company Arconic Foundation

ARM, Inc.

BAE Systems

Bechtel Group Foundation

Caterpillar, Inc.

Corporation for National and Community Service (CNCS)

DEKA Foundation

Dow

FedEx Corporation

Ford Motor Company

General Motors Company

Google Matching Gifts Program .

Google Mayes County

John Deere Leidos, Inc.

Motorola Solutions Foundation

Rockwell Automation, Inc.

Schneider Electric

TE Connectivity

TE Connectivity Matching

Gifts Program •

Up to \$249,999

100 Black Men of Atlanta Inc.

AAON, Inc. ARR Inc. Abbott Fund AbbVie. Inc.

Aerojet Rocketdyne Akamai Technologies, Inc.

AllianceBernstein

Alpha Omega Epsilon

Altice USA

America's Charities Analog Devices, Inc.

Applied Materials Foundation

Antiv Foundation

Arco Murray Charitable Corporation

Ariel

Assurance Agency

Assurant Foundation

AT&T, Inc.

Atlassian Autodesk, Inc.

Automatic Data Processing, Inc.

Ball Corporation

Bank of America Corporation

Barr Engineering

Bar-Yadin Family Foundation

Battenberg Foundation

Baxter International Foundation Bechtel Corporation

Beckman Coulter Foundation

Becton Dickinson

Beth Israel Deaconess Medical Center

BlackRock Bloombera L.P.

Bloomberg Philanthropies

Bonfire

Booz Allen Hamilton, Inc.

Boston Scientific Corporation

Burns & McDonnell Engineering Company

Call Before You Dig

Carrier Global Corporation Cedar Falls Scheels

Charities Aid Foundation of America

The Chickasaw Nation Chipotle Mexican Grill Cisco Systems, Inc.

Cognizant Technology Solutions

CollegeAdvisor.com Compast NBCUniversal

Cruise Automation

Cummins Dell. Inc.

Digi-Key Electronics Dominion Energy DonorsChoose.org

DoorDash

Draper Laboratory

DuPont

Eaton Computer Services

Fortive

Emerson Automation Solutions

Estée Lauder F5 Networks FIRST RGV. Inc.

Franklin Philanthropic Foundation

Lex Fridman Podcast

Frontstream

General Dynamics Information Technology

General Electric Company GF Healthcare

General Electric Power Systems Girl Scouts of Western Washington

GitHub

Givable St. Louis Givinga Foundation, Inc.

The Grace Foundation of Terrie O'Connor

The GRACO Foundation Granite United Way Greenspan Foundation The Leona M. and Harry B.

Helmsley Charitable Trust Hewlett-Packard Company Honda of America Mfg., Inc.

Intuitive Foundation

Isthmus Engineering & Manufacturing Co-op Jackson National Life Insurance

Johnson & Johnson Family of Companies

Johnson Controls, Inc.

Just Give KI A-Tencor

Lakeside Foundation Lawrence Livermore National Laboratory

Lear Corporation LEGO® Education LexisNexis Littelfuse, Inc.

The Little Stream Fund Lockheed Martin Corporation

Make My Donation, Inc. Mass Mutual Financial Group

MathWorks, Inc. Mattlin Foundation

McCoy Charitable Fund R. J. McElrov Trust Medtronic, Inc.

Microsoft Corporation

Microsoft Matching Gifts Program • Motorola Solutions, Inc. Mouser Electronics, Inc.

National Grid NDC Technologies, Inc. NRG Energy, Inc.

OCAST

Oklahoma State University College of Engineering, Architecture and Technology

Optum Services, Inc. Oracle Corporation Oracle Foundation

Orange County Florida

Ori Inc.

Otis Elevator Company Palo Alto Networks

Panasonic

Parker Hannifin Corporation

Paymerang, LLC PavPal

Pentair Foundation

Pershing Square Foundation

Pfizer Inc. Phillips 66 Picatinny Arsenal Plex Systems, Inc. Polaris Industries, Inc.

Programming Electronics Academy

PTC, Inc. PwC US R2OC

Rapp Charitable Trust

Regeneron Pharmaceuticals, Inc. Robison Engineering Company, Inc. The Society of Cable Telecommunications Engineers (SCTE) Sony Corporation

SpaceX Spark The Standard Stantec (US)

Susquehanna International Group Synoptic Engineering, LLC

Taipei American School Foundation

Target T.D. Williamson

Tennessee Valley Authority (TVA)

Teradata Corporation

Teradyne

The Texas Instruments Foundation Educational Matching Gift Program .

TripAdvisor LLC

Twitter Two Sigma Investments, LLC United Launch Alliance (ULA)

United Services Automobile Association

United States Air Force

United Therapeutics Corporation UnitedHealth Group

University of California, Davis UVAS Foundation

Ventura County Office of Education

"As a participant, FIRST taught me to be confident and bold. As an alum, FIRST has taught me to be humble. FIRST has made my life what it is today, and I will be forever grateful. I hope to help many students experience the same impact as I have. Here's to decades more of FIRST opportunity.

Honeywell International Inc.

Hypertherm **IBM** Corporation

Intel Corporation

Intel Foundation

International Paper

NetApp News Corp

NI NOKIA Bell Labs Nordson Corporation

Novelis, Inc.

S&P Global

S&P Global Foundation Salesforce.com Science Applications International

Corporation (SAIC) Siemens Corporation SIM Foundation

Simply Donating

Viasat, Inc. Virgin Galactic VMware Foundation Wells Fargo Foundation Wolf, Greenfield & Sacks, P.C. Woodforest Bank

Xerox Corporation

impact, influence, and inspiration. Here's to a brighter future." - Maddie Burris, FIRST alum, donor, and volunteer

Howmet Aerospace Foundation NH Joint Engineering Societies IBM Employee Services Center ♥

INDIVIDUAL DONORS & FAMILY FOUNDATIONS

\$100,000+

John Abele ■
Glen Tullman
Josh Weston *

Anne Wojcicki Foundation

\$25,000 - \$99,999

Larry & Tami Cohen
Brady Law ◆
Aaron Raphel
Robert & Lynne Schwartz

Dr. David Siegel ■ \$5,000 - \$24,999

Michael Ambrogi Mary Ann Borgman Don ■ & Susan Bossi

Don Bulens
Stephen Charles
Cosema Crawford

James Dimon Victor & Patricia Ganzi Greg ◆ & Lily Stanton Marra
Charles Hazlehurst Moura
Family Foundation
Gary ● & Diane Tooker
Turner Family Foundation, Inc.
Bob ■ & Lynn Tuttle

Paul & Judy Ulland Dr. James & Miriam Weinstein

Up to \$4,999

Premkumar A. Beata Abbs

In memory of Bill Collins Aliaa Abdel-Gawad Robyn Abend Christopher Abraham Redmond Abutin Patty Acree Linda Adair Crystine Adams Mark Adler

Dr. Perry Adler Ahmad Adnan Larell Adney Strickland Alicia Agostino Susan Agrawal

Patricio Aguilar

Dale R. Anderson
Jeffrey Anderson
Matt Anderson
Pamela Anderson
Raghu Anna
Philip Aponte
Dina H. Appleby
Esmeralda Aranda
Eric Arndt
Michael Asker
Abiola Assoio

Anand Atreva •

Dana Aucoin
Rebecca Avery ◆
Harris Ayaz
Anthony Aznar ◆
Frank Azor
Alexey Babaytsev
Piotr Bachowski
S.C. Backstrom
Stephen Backstrom
Sumukh Bahulekar
Nick Bailev

Tara Bailey Nitesh Bajaj ◆

In honor of Nikhil Bajaj

"The real world is about uncertainty and making tradeoffs. When the algorithms you learned in school don't cut it, or your plans don't work, or your information in a given domain is incomplete, that changes the way you think about problems and react to failures. Having that real-world experience so young, through FIRST, was huge."

- Ajay Penmatcha, FIRST alum & donor

Frank & Kathy Grossman
Walt Havenstein ■
Dr. Paul Jacobs ■
John & Maryan Karlen
Lisa & Peter Larocque
Thomas & Paula McInerney
Scott McKay ■
Momtazee Family Fund
Dennis Muilenburg ■
Kevin Murai
Ajay Penmatcha ◆

Sir & Madam Safra

Birgit Sorgenfrei

Kennie Albritton
Mark Alderton
Eric Aldridge
Sam ◆ & Danielle Alexander
Ginny Allaby
Jessica Allace
Lucy Allardyce
Joseph Allegro

Yeaor Akushevich

In honor of Remy Allegro Rhona Alter Sue Amar Cindy Anderson Anita Balachandra John Bald

In memory of James Rahaim Anthony Baldridge

David Ball
Janet Balsley
Philip Baltar ◆
Sourabh Bansal
M. Banya
Maryka Baraka
Sarah Barkema
Garrett Barks
Christopher Barnes

Nathan Barnhart Christina Barrese Barstow Household Ethan Barstow Jackson Barstow Jeff Barstow Jim Barstow Yulia Barstow Aaron Bartholomay Todd Barto Paul Bartomioli Randall Basinger Lisa Basye Wright Sveta Bazhko Katie Beachy

Randall Basinger Lisa Basye Wright Sveta Bazhko Katie Beachy Chris Beaucage William & Diana Beaulieu Bob Bechtold

Bob Becktold
Jerry Becker
Ian Beckman
Michael Behrmann
Amber Beito
Kenneth Belcher
Brian Bell
In memory of Ed Rivera

Mehdi Benbecher Holly Bender Trudy Bender Aiden Bengds

William & Kathleen Bentley

Judy Bergeron

In honor of Liam Marcotte

D.A. Berkowitz Theodora Berlatsky In honor of Madelyn Winters Donna Bernardon

Debra Bernier Marilyn Bernstein

Daniel Bess

In memory of Jesse Laufer

Jayant Bhawalkar Amod Bhide Rajeev Bhuvaneswaran Zach Bialik Alfred & Joan Bie Will Bierbower Douglas Binder Chad Bishon

Douglas Binder Chad Bishop Ted Blackman Jane Blau Brooke Blew Stephen Bohm Marc Boisvert Arlene Booker Marcin Borowicz Kristina Borrelli In memory of Ed Rivera

Meghan Borsic Steven Botwinik Hrant Boujikian T.J. Bowser James Bovce

In honor of Bill Collins

JoAnn Boyd Robert Boyle Joseph Brady Aaron Brandt In honor of Jacob Brandt

Missy Brandt Wilson Ernest Branigh Jeff & Sue Braun Jose Bravo ◆ Carol & Daniel Bricklin Jonathan Brizzolara ◆ Christopher & Barbara Brody

Christopher & Barb Cathy Bromberg Taylor Brown Donna Brownell Spencer Brubaker Kevin Bufkin Coi Bui

Konrad Bujak

In honor of Keivon Graves

Terrell Burch
William Burgess
Kody Burke
Venugopal Burla
Gordon Burlison
Madeline Burris ◆
Joseph Bursley ◆
Benjamin Burwinkel
William Butter ◆

In memory of Trey Butler

Jim Butts
Jeffrey Cadman
Courtney Cagnon Jorgensen
Zachary Caldarola
Bryan Calkin
D.G. Callan
Gary Campbell
Gaylia Campbell
Daniel Canterino

Gary Campbell
Gaylia Campbell
Daniel Canterino
Tom Cardinali
Lino Carnesecca
David Carr
Bianca Carter
Daniel Cartoon
Jean Casavant
Diane Cast
Cathy Castle
Daniel Castro

Marc Center Adrian Cepleanu Michael Chabinyc Isabella Chan Thomas Chan Ron Chaney Nancy Chang Todd Chapman William Chapman Edward Charbonnet Robin Charlton Nikolas Charos Julien Charra Rodolfo Chavez Daniel Chen • Geng Chen Jina Chen

Sing Chen
Xi Chen
Brielle Chenier
Mario Chenier
Nay Chi
Ying Chi
Van Chiem
Babu Chimata ◆
Mary Chiroi-Murphy
John Chitalia
Christy Choate
Loraine Christensen
Marty Clapton
Doug Clark

Loraine Christensen
Marty Clapton
Doug Clark
Logan Clark ◆
Mary Clark
David Clary
Barbra Clements
Rebecca Clements
Coates Family Charitable

Coates Family Charit
Reuben Cohen
Stuart Cohen
Daryl Coleman ◆
Paul Collazzo
Karen Collins
Liz Colton
Renee Combs

Thalia Condo In memory of Hedy Lamarr

Robert Consalvo
Pamela Cook
A.J. Coon
Robert Cooper
Jarrett Corcoran
Andrew Corrington
Laura Corsetto
Paul Costa
Kris Cox
Henry Crain

Douglas Crandall George Creasy In memory of Daniel Creasy Sheri Crockett Paula Cronin In memory of James Prygocki Dawn Crowe Beth Culp John Cuneo Karen Curran Hollie Curry Lawrence D'Addario Pat Daly and Henry Schreiber Dominic Danna + Lori Dantonio Steven Dao • Jane Davidson Dr. Laura Davenport Matthew Davidson Michael Davidson > Britt Davis Marvin Davis Bruce & Mary Dawson Valerie Dawson Richard Day Meghana Dayananda Robert Debes Michael Deegan David DeGabrielle Kimberly DeMaro In honor of Thunder Chickens Alex Deneau Sean Deneen Kerry DenHerder Trevor Dennie Chris Dern Nicole DeRosa Susannah Dickerson Serenity Dillaway Susan di Lustro • In honor of John W. Seilo Daniela Dimova Emily Dixon Zarshed Djamaliddinov Jack Doherty • Derek Doucette Seena Drapala Edwin Drewitz Justin Du 🔷 Matthew Du • Mike Duello Christopher Duffey Donna Dukeshire James Duncan Cvnthia Dunlap Michele Dunleavy

Terry Durkin Duane Flier In memory of Scott R. Frock Jasmine Florentine In memory of Gene Woodwood Kristin Flores Erin Durocher Connor Fogarty • Hannah Dym Keith Fona Nancy Eastman In memory of Edwin Rivera Derek Eaton Michael Force Sean Ebanks Kathryn Ford-Zawislak Allison Eckel In honor of Edward Zawislak Will Fder Caitlin Forinash • Angela Edgington Linda Foss Victoria Edmonds Derek Foster Virginia Fhemann Joseph Foster • Renee Eiseline Christy Fournet In memory of Edwin Rivera Donna Foy Vijayan Ekanathan Jeff Franciski Arun Eledath Emily Freeman Dani Elle Maureen Friend Jerad Ellenberger • Katie Frierson • Angela Ellerbroek Anna Friesen Richard Flliott Nancy Frisch Annemarie Ellman + Bill Fritz Sally Emanuelli In memory of Bill Collins Richard Eshleman Emily Fu April Esquivel Paul Fuller Grayson Estes + Collin Fultz • In memory of John Estes Philip Gable Meeraiah Etigunta David Gaensbauer In memory of Michelle Gagnon Nagarathnamma Etigunta Nina & Mark Gaines Kirk Evans Michelle Galer Robert Evans

Mary Gancarz Laurie Everhardt Roxann Gancarz Ron Falcone Tyler Gardner Leslie Farher Christopher Garrett In honor of Mia Farber Kathy Gascon Angel Farnsworth Michael Gaul Dave Farris Mack M. Gaut Jeff Fast Amy Gauthier Kelly Fehr Pat Gencarelli + Garrett Felker Elizabet George-Melakavil Mariel Feller Adela Georgeta Jeffrey Fenstermaker Christopher Gerhart Peter Ferlazzo Marvann Germita Alexander Fernandez Omar Ghani 🔷 Andrew Fernie Deborah Giambo Marc Ferris Krista Gilbert Erica Fessia Caroline Gill In memory of Ken and Michael Gindl Leticia Newton Gary Gingras Jim Fillman Gerald Fischer Anatole Ginsberg Andrew Fisher Mark Giordono Donald Fitzgerald Brett Gitter

Amanda Gladysz

Charles Glueck

Jacob Glueck

Andrea Fitzpatrick

In memory of Robert Flegal Sr.

Robert Flegal

Joel Goering • Mandy Goering Scott Goering Dr. Jeffrey & Doris Goldstein George Gomez Tricia Gomulinski In memory of Bill Collins Rowan Gonder

Matthew Ha Cris Haase Amher Hahowski Dave Hale Robert Hall Ross Hallren In memory of Edwin Rivera Joshua Haner

Jonathan Himelspach In honor of Daniel & Leslie Himelspach/Lawson Akbar Hirani Belita Ho In memory of Woodie Flowers Richard Holiman Jennifer Holling

"We are thrilled to collaborate with FIRST again this year and engage young people in STEM learning. Educating our youth and providing access to FIRST programs for students of all backgrounds has never been so important as it is right now."

- Kathleen Kennedy, president, Lucasfilm, FIRST sponsor

Kelly Goodman Sarah Goodman Paula Goodrich-Gatza Andrea Gordon • James Gorham • Timothy Goudae Beth Gousman In memory of Bill Collins Melanie Graham Robert Graham Maggie Grainger Cynthia & Joshua Green In honor of Zachary Jablons Jeremy Green + Peter Green

Alan Grier Drew Griffin-Tremaine Christopher Grontkowski Larry & Jan Gros Elsie Gross In memory of Bill Collins Brett Grossman Bonnie Gruber Patrick Guha + Christopher Guilford Maria Guiti

Courtney Gulledge Kaining Guo • Bharat Gupta Barri Gurau Lorri Gurnett Bridget Gutting +

Chris Greene

John Gregor

Claude Hardy Charles Harris Debra Harris Nina Harris Peter Harrod JaDee Harsma Winthrop Harvey Jennifer & James Hausch Dwight Havens Tyler Hawken Dean Hawkinson Laura Hayman Juntao He +

Kari Headington In honor of Thomas McKay Lynne & Henry Heilbrunn Clay Helberg Helen Helberg Ethan Heller • Kait Helman Allen Henderson Kevin Henderson In honor of Edwin Rivera Shelley Henderson Kathryn Henkel Bryan Herbst • Zac Hester Marillyn Hewson Charlon Hibbard

Micah Hignight

Rexford Hill

Wm Hill

Natalie Hollis Chris Holmen • Robert Holmes Peter Hosinglov Jessica Hoskins In honor of Amanda Rogers Eric Hounchell Steven Hovey Marc Howard Dana Howe Andrew Howell Jacob Hovlman Pevo Hristov Petya Hristova Chris Hughes Amy Lynn Hunt Steve Hunt Jon Hunter A.J. Hurst Syed Hussain + Michelle Hutchings Dino Ignacio Susan Ilax Nick Induni + Duncan Inganji In honor of Duncan Inganii

Arlenis Inoa • Steven Ishida Gayatri Iyengar Subhash lyer Dai Izaki Nicole Jack

David Jackson

Marie Innes

Eric Jacobsen Pamela Jacoby In honor of Adam Belzberg Reddy Jakka Sarath Jaladi Leslie James Gilberto Jasso Anantha Javali Nasi Jazayeri Austin Jenchi • Oliver Jenkins • Rachel Jenkinson Yunha Jeon Jianhong Jin Keith Jobe Rushil Johal Alice Johnson Ashlev Johnson Christopher Johnson Jenny Johnson Kurt Johnson In honor of Jim Rothrock Matt Johnson Mike & Nina Johnson Sarah Johnson Sharon Johnson Timothy Johnson Willard Johnson George Johnston Dave Jones David Jones Khai Jones Lvnda Jones Aneesh Joseph Karen Judd Jason Justian Josh Kagerbauer Tarun Kale Gust Kallas Avushee Kalura Evelyn Kamen Libby Kamen • Ruth Kamen Andrew Kammerer • In honor of Michael Young Julie Kanagy In memory of CJ Johnson Thirumalesh Kanchana > Frica Kane Kevin Kane Robin Kargoll Oleh Karpenko Blaine Kashiwaeda John Kates Joe Kellev Charles Kennedy

Michael Kennedy Patrick Kennedy Ben Kershaw Avanti Kesavan Roseanne Khaleel Ravee Khandagale Delbert Kimbler In memory of William Collins Samantha Kirsh

Daniel Landherr Ken Languedoc Nora Lantagne In honor of Stan Zagaieski. Paul & Ouin Todd Lantz Michael Larison In memory of William Collins Fllie Larsen

Sam Laver

Ryan Lawson •

Bonnie H. Lindblom In memory of David A. Smith Michael Lindemuth • In memory of Bill Collins Peggy Lindgren Alexandra Lita Zavra Lobo • Guv Lohman Wendi Lohmar Duane Lom

Kevin & Maria Long •

Sonia Lough

Michael Love

Michelle Long and Isaac Mishkit

Michael Marshall Shaun Marshall In honor of Donna Marshall Anva Martin Haley Martin Melissa Martin In honor of Grayson Martin Janice Martino Emily Mastropietro

Ty Marr

"This program is by far the best inspirational program I have ever experienced with our youth. The impact FIRST makes on students challenges them on the education they receive in class and makes it the most rewarding... experience of their lives. I feel fortunate that three of my children participated in the program and continued to mentor teams both during and after college. ... I am pleased to see the pandemic is not preventing this program from advancing."

- FIRST parent and donor

Heidi Kiser Jennifer Kite Timothy Klemm John Kline Kathleen & George Klinich Chris Knapik Jesse Knight Christine Koch In memory of Edwin Rivera Joi Koenig Shimpei Koike • Derek & Angela Konigsberg Paul Kooi Andrew Kowalik Paul Kraft Emmett Kraus • Krever Family Paul Krinsky Yvonne Kruse Ivan Kuchin Maria Kuenzer • Elena Kuleshov Abhay Kulkarni Gaurav Kumar Julia Kuziomko Tiffany Kwan • Labot Household Anthony Lafata . James Lagan

Alycia Lambert

Bach-Hue Le Nhien Le + Gary Lee Gregory Lee Lawrence Lee Scott Lee Scott Legasse Kate Leipold Arielle Leon In honor of Jenny Chung Jon Leopold Phillipa Leseberg Kenneth Leslev • Christopher Lester • Jonathan Levesque Stephen Levin Kate Levine-Freedman In honor of Gordon Franken Levy Household Grea Lewis Cindy Li + David Lieber Moriah Lim + In honor of Anne Sullivan Alexsander Lima Kapil Limbu Fei Lin Shi-Key & Irene Lin Beniamin Linas Brian Lind

Laura Lubash In honor of Zack Dooley Jamee Luce Nicholas Luciano + Maxim Lukiyanov Jeffrey Lumsden Daniel Luna Kevin Luo • Randi Luster-Delgado Heather Lynn Marc Ma Alex MacCurdy ◆ Kyle Macey Karen Mack In memory of Ed Rivera Adrian Madland Pamela Maker Mufazzal Mala Varun Malhotra Daniel Mallinger Deborah Mann Praneetha & Vijay Manthravadi Ian Noel Marcellana Carla Marie Jason Markesino • Mary Beth Marks Catia Margues

Nicholas Mata . James Mathison Devesh Mathur Jewel Mayesh Dabah In honor of Craig Singer Deborah McCabe Catherine McCarrell • William McClung M. Heidi McClure Michele McDuff Carter McFathron • John McFadden Paul McGartoll Shannon McGrane Robert McGuire Michael McGurk Cassie McIntvre Kate McKeaa Lara McKenzie-Heckert Janet McKinley Erika McKinney Jenna McKlusky McMullen Family Foundation Tyrone & Lisa McNichols McOwen Freeman Household Bethany Medland Sanford Meek Chetan Mehta Merwan Mehta

Tapan Mehta

Frank & Deb Merrick Janice Merrill-Rossi Joseph Metzger Pam Meyers Michael & Emily Household Dennis Michaud Sheila Mihelic Anastasia Miliano + Cody Miller • Dan & Kimberly Miller Matthew Miller Max Miller • Michael Miller Alina Mills In memory of Bill Collins Mindy Miner Marietta Miniares Elizabeth Miranda + Gerald Mitchell Monica Mixon Elan Mizhiritsky Alison Moffat Afrah Mohasin Dick Moomaw Nicole Morales T.M. Morar Rowena Morehead Flizabeth Morgan In honor of Dean Kamen Marla Morgen Robert Morse Wesley Moss Julia Motchkavitz Sailaja Mothukuri Peter Mueller Katherine Muhlrad Brian Muirhead Venkataramana Muniraj Ramesh Muniswamy Roland Munsil • Swetha Murali In honor of Daniel Kaplan Marian & Brian Murphy Sean Murphy Seanan Murphy Stephen Murphy Victoria Murray Sowmya Murthy

Bret Musser

Ravikiran Nagavarapu

Kevin Meier

Sarah Meindl

Stephen Melamed

Sara Melo-Pereira

Marlene Meredith

Theresa Merino

Radhika Nair Kiri Nakagawa Susumu Nakagawa Jinving Nan Kishanb Nataraj Jose Nazario In honor of Jose Nazario Tim Neiman Nikita Nekrasov In honor of Jamie lannone Frank & Barbara Nelligan Rajasekaran Nellore Sophie Nelson Ron Newcomb Honda Ngo Hien Nguyen Dr. John & Patricia Nguyen Thomas Nauven Max Nibert Elana Nicholls Karen Nichols Margaret Nichols Jonathon Noonan Carleen O'Brien Gene R. O'Brien Jennifer O'Callaghan Helen & Tim O'Connell In honor of Bill Collins James O'Connor Jim O'Connor Bruce O'Hurley Ryan Okerson Rosemary O'Leary Sue Oliver Sandra Olliges In memory of John Olliges

Jose Ortega Mark Ovanin Bryant Overgard • Ran P. Dominic Pace Isaac Pachulski In honor of Craig Singer Susanna Packauskas-Lewalski Cynthia Paden David Palandro • Catherine Palmer-DePelsMaeker In memory of Edwin Rivera Tammy Pankey Julie Pannuto • Douglas Pantazis Kelly Parent Guillaume Parisien • Ben Park Jeffrev Parker Paul Parker David Parks Suzanne Parsons In memory of Ed Rivera Bindiya Patel Samyogita Patil Edward Patterson William Patterson Derek Paxson Hilton Peel Victoria Pekar In honor of Kyle Pekar Josh Pelkey Henrique Pereira Erica & Francisco Perez

Raymond Persaud Eric Persinger Steve & Kalli Peterson Doug Petesch Taryn Petryk John Petrykanyn Kathy Petschke Linda Pham Kylie Phelps Sarah Philbin In honor of Jennifer Gatza Arlene Pickus In memory of Andrew Stern Andrew Pierson James Pillot • Anna Pimenta John Pizzo 🔷 Christina Plachinski Kelli Plasket Kevin Plessinger Aleiandro Plischuk Danielle Pliska Donald Plotz Adriana Pohl • Marc Polansky Joseph Polin • William Pollak Michael Pomianek Garrett Ponder Charles Poole Iris Poppy Mildred Porter Cynthia Potter Helen Potter

David Ragones Geoff Rake In memory of Marcia Plaag Gallos Schroeder Murli Rao Norman F. Raphael In honor of William "Bill" Petersen Morgan Ratcliffe Jeffrey Rauen Richard Reeves Aaron Rehm Azeema Rehman Richard Reimels Rvan Reliford In memory of Paul George Claire Renner Nick Rericha Jill Rhea 🔷 Kyle Ribordy • Melody Ricci Michael Poulter Brian Richards • Jim & Cindy Richardson Ariel Rideout Amy Rinaldo Eric Ringger Joe Risi 🔷 Adam Rizika Michael Rizzo Garth Roark Monique Robbins Shawna Roberts Mike Robins Carlos Robinson Austin Robison • Jacqueline Roche + Lauren Roches Craig Rochester

Carolyn Rodenkirch

Heidi Rodaers

Kate Rodgers

Jennifer Rodgers

Brittain Prigge

J. Lynn Prince

Barbara Proctor

Kathleen Prvgocki

Karen Purry

Rodney Qualls

Ali Rafieymehr

Shreya Ragade

Vijay Raghuram

Anna Quinn

Eric Pylko

Jane & Thomas Propst

In honor of Deborah Scher

In memory of Vanessa Lewis

Roger Romani • Sarulatha Selvan Tina Romosz Ronald Semel Diana Rook Ananya Sen Eric Rosen Robbin Sentell In memory of Ed Rivera Memorial In memory of William Collins Kimberley • & David Prygocki-Jeakins Lucie Rosenberg P.M. Sesha Sally Rosloff Lucas Severin Kathie Ross John Sevbold Kenneth Ross Daniel Sgarabottolo Marilyn Ross Rishabh Shadra • In honor of John Olliges Gaurang Shah Scott Ross Ravi Shah Hannah Rothwell Rupesh & Manisha Shah Laura Roty Pranav Sharma • Justin Routon Luke Sharman Jeff Ruber Dennis Shen • laor Rudfeld Eric & Mary Sherk Rick Russell Vicki Sherwood Douglas Saferite Jennifer Shneiderman Mikhail Safronov Carter Shoer David Sager Nathan Short Mohit Sahai Gayle Shull Marudhu Sahana In honor of Lily Amato and Iva Bowman Helen Sain Dr. Jeffrey Siegel Justin Sakai Lisa Siegmann Sakamoto Family Fund Aubry Siepe Adam Salem Fred Silberberg Phillip Salm Brian Silverman Sam Household Steven Silverman Oluwafemi Samuel Danielle Simmons Augusta Sanfilippo Spencer & Debra Simons Derek Sangkyu Park In memory of John Pilvines Francine Sapowicz Gerald Singleton In memory of James Prygocki Naveen Sinha Sandra Savage James Sinn • Isaac Sayasane + Laurent Sinner Kristine I. Scarpone John Sirusas Bruce & Patricia Schafer Roy Sivley Scott Scheeler Susan Skemp William Scheidegger Sasha Slocum Sam Scheinman + Frica Slomka Mark & Juanita Schemel James Sluka Deborah Schimmel Dale Smith Bruce Schober Megan Smith Denise Schoepf In honor of Linda Stone Katherine Schoepp Robin Smunty-Jones Joanne Schofield Christina Snyder Larry Schroeder Jeffrey Snyder Jordan Schulman

Chris Rogers

Aliza Scott

John Seabury

Tiffany Sees

Hannah Seebach

Alessandro Seidita

Christopher Rogers

Jerry Sellers

James Sellstrom •

"With advancing innovation at the heart of everything we do at Qualcomm, we are thrilled to collaborate with FIRST to expand opportunities for students from all backgrounds to discover, innovate, and be inspired to become the next generation of inventors."

- Angela Baker, senior director of corporate responsibility, Qualcomm Incorporated, FIRST sponsor

Russell Perkins

Michael A. Perlin •

Mary-Ann Oluwanifise Lori O'Neal Cary Orlandi Lisa Orme Kelly Ortberg

Barbara Perlov Dominic Perna Joseph Pernici Jordan Perr-Sauer + Mark Perry

Marcy Prem Stacy Pressman Leanne Price • Charles Priese In memory of Alex Priese

In memory of Jesse Laufer

Natalie So +

Andrea Sobel

Jeff Soesbe

Marc Solomon

Miriam Somero Harpreet Soni Karan Sood Danielle Soto Jason Soucy Aleisa Spain Samantha Spain Eileen Span + Ann Spangler Ashley Spence Andrew Spencer Kaitlyn Spencer + M. Spillane Miranda Spina Adam Sprecace Vasant Srichawla

Sravan Survadevara • Kathryn Svoboda • Daniel Szrnka Leah Szymanski Alissa Tafti

In memory of Edwin Rivera

Jan Takasugi

In honor of Brian Aggrey Gregg Talewsky •

Katherine Tang Bruce Tannahill Matthew Tanzy Ge Tao Hollyn Tao Wyatt Tauber •

Debra Taylor

Joseph Turckes Natalie Turcotte Brian Turner Karl Twelker Joseph Tyburski Brian Tyrrell Richard Uecker In memory of Diane Clark

Laura Tucker

David Urban Ronald Uyeno Sreedhar Vakiti Meg VanHouten L. Van Lieshout Anand Vardhan Joe Varnell

"FIRST gave me so much as a student, introducing me to STEM study, electrical and software work, and applying engineering concepts outside the classroom. Volunteering helps me give back and give those same experiences to students and future engineers."

- Jason Cheng, FIRST alum and volunteer and software developer for Amazon Logistics, FIRST sponsor

Donald Stacy William Stansbury Fthan Steininger • In honor of Michael Steininger Ryan Steinkerchner Leslie Steinmever Dana Stepleton In honor of Jay Stepleton

Marc Stevens Mark Stevenson Nicholas Stewart Richard Stocking Ted Stokes Dia Stolnitz Dean Storgaard

Kay Sterner

James Stroka Susan Studer Chienfu Su Fllen Su

John Sullivan Scott Sullivan Changiie Sun Danny Super Michael Surface

In memory of Edwin Rivera

Drew Taylor Kevin Taylor Margaret Temeles Paul Tenreiro Leah Terreforte Lee Ann Tester Mark Thackray Sacha Thebolt Ben Thomas • Carol Thomas

In honor of Team 5687 The Outliers

Elizabeth Thomas Troy Thomas Jocelyn Thompson Michael Thornton Brynnan Timmerman In honor of Chris Cortez

Todd Tinker Kenny Toh

In memory of Woodie Flowers

Donald Tong Isabella Torres Brandon Trabucco Kevin Traute • Anna Trively •

In memory of Woodie Flowers

Keyur Ved • Rajesh Venkateswaran Josua Vicioso Jacob Vick Eduardo Vinocur Andrew Violette • In honor of Jim Troy Huy Vo

Valentin Vasilescu

Patrick M. Volk Anthony Vu Stephen Wade Richard Wagener Aric Walker Robert Wall In honor of Ian McEwan

A.G. Walling Morgan Walls-Dines In memory of Ed Rivera Karen Walsh Katlin Walsh •

Britton Ward Christopher Warner Eric Warner Patti Waycaster In honor of Austin Wavcaster Andreas Weber Annette Webster Beverly J. Weeks In honor of Armaan Tornow Wei Household

Jonathan Weiland Bob Weis Christina Wells

In honor of Kay Wells

Paul Wendel David Wert Richard West Vincent Westin Brian Wheeldon

Karen Wheeler In memory of Edwin Rivera

Jenna Whitmire In honor of Sheila Duong Justin Whitty

Victoria Whydell • In honor of Tyler Barthel

Robert Wieczorek

John Wight

Dr. Vince - & Jean Wilczynski

Lucy Wilke Michael Wilke

In memory of Ed Rivera

John & Lucie Wilkens Ken Williams

Charlotte Willian Jason & Victoria Wilner

Kyle Winters

Zachary Wissen Andrew Witman •

Bryan Wolfe Lara Won

Pamela Wong • Lvnn Wood

James Wooster Kenneth J. Woytowich

Hannah Wright In honor of Jacob Wright

Kenneth Wright Timothy Wright

Yiliang Wu Amber Wycklendt Yosuke Yajima

Zachary Yamaoka

Teema Yassine Austin Yates

Hona Ye Steve & Samuel Yeager Kidus Yohannes •

Margaret York • Kay Yoshida

Abigail Young •

Michael Yu Ning Yu Richard 7ak

William Zanone Kathrin Zieger

Marc Ziss Peter Zobel

In honor of Isolina Carlini

Thomas Zuend Nathaniel Zuk

DR. BART KAMEN MEMORIAL FIRST SCHOLARSHIP

FUND CONTRIBUTORS

Continued special thanks to the Argosy Foundation and the DEKA Foundation

2020-2021 FIRST ALLIANCES

Alpha Omega Epsilon (A.O.E.) American Society for Engineering Education (ASEE) Automation Federation/ISA

Boys & Girls Clubs of America Electronics Components Industry Association (ECIA) Foundation

Girl Scouts of the USA

MIT Alumni Association National 4-H Council

National Center for Women & Information Technology (NCWIT)

National Fluid Power Association (NFPA)

National Parent Teacher Association (PTA)

National Robotics Week

Sigma Phi Delta (SPD)

SIM Foundation

Society of Hispanic Professional Engineers (SHPE)

Society of Women Engineers (SWE)

Triangle Fraternity Yale Science & Engineering Alumni

2020-2021 SEASON FIRST LEGO **LEAGUE SPONSORS**

Founding Partner



Global Sponsors



The **LEGO** Foundation

Challenge Division Sponsor



FIRST LEGO League Global Innovation Award presented by Star Wars: Force for Change

Presenting Sponsor

Star Wars: Force for Change

Partners in Innovation Booz Allen Hamilton, Inc. LEGO® Education

Global Innovation Collaborators

Collins Aerospace John Deere

Oualcomm Incorporated

Media Partner Cheddar News

In Cooperation with United States Patent and Trademark Office

Top Team Sponsors

(10 or more teams in 2020-2021) Sponsors in this section are listed in descending order starting with the sponsor of the highest number of teams.

FIRST LEGO League Explore

DoD STEM

Apple

John Deere

The Boeing Company

Tennessee Valley Authority

Amazon Future Engineer

Bosch

Dow

Rockwell Automation, Inc.

Oualcomm Incorporated

TE Connectivity

FIRST LEGO League Challenge

DoD STFM

Amazon Future Engineer

John Deere

Apple

The Boeing Company

Caterpillar, Inc.

Rockwell Automation, Inc.

Tennessee Valley Authority

Oualcomm Incorporated

BAE Systems

TE Connectivity

Overdeck Family Foundation

Google

Collins Aerospace

Raytheon Technologies

Dow

Bayer Corporation

Bechtel Group Foundation

Motorola Solutions Foundation

Leidos, Inc.

Picatinny Arsenal

Pratt & Whitney

Aptiv Foundation

2020-2021 SEASON

FIRST TECH **CHALLENGE SPONSORS**

Season Presenting Sponsor



Program Sponsor



Key Sponsor



Top Team Sponsors

(10 or more teams in 2020-2021) Sponsors in this section are listed in descending order starting with the sponsor of the highest number of teams.

DoD STFM

Arconic Foundation

John Deere

Apple

The Boeing Company

Lockheed Martin Corporation

Amazon Future Engineer **Bayer Corporation**

PTC. Inc.

TE Connectivity

Caterpillar, Inc.

Qualcomm Incorporated

Picatinny Arsenal

Google

Rockwell Automation, Inc.

Collins Aerospace

DEKA Foundation

Motorola Solutions Foundation

Schneider Flectric North America Foundation

BAE Systems

Dow

Intuitive Foundation

Leidos, Inc.

Raytheon Technologies

Tennessee Valley Authority

Bechtel Group Foundation

Bosch

2020-2021 SEASON

FIRST ROBOTICS COMPETITION **SPONSORS**

Suppliers

Crown Suppliers

The 3M Company Automation Direct

Datto, Inc.

FedFx Corporation FedEx Freight

Innovation First International

PTC. Inc.

REV Robotics

Rockwell Automation, Inc. DS SolidWorks Corporation

Underwriters Laboratories, Inc. (UL)

The Walt Disney Company

Diamond Suppliers

Altium

Digi-Key Electronics

Worcester Polytechnic Institute

Gold Suppliers

Adobe

Analog Devices, Inc.

AWS Educate

Bishop-Wisecarver Corporation

BURNDY LLC

Clippard Instrument Laboratory

Festo

Gates Corporation

igus Inc.

Inventables

MK Battery

Novelis, Inc.

Ruland Manufacturing

Siemens

Silver Suppliers Anderson Power Products

Armabot Beldin, Inc.

CUI Devices Digital.ai

DriveWorks Ltd.

Flex Seal Family of Products

Fluke Corporations

Johnson Electric

Mathworks, Inc. MaxBotix Inc.

Molex

Mouser Electronics

RoboPromo Swvft Robotics

TE Connectivity Wolfram Research

Bronze Suppliers

CTR Electronics

Cypress Epec LLC John Deere

Kauai Labs, Inc. Loctite

Mastercam

Next Gen Robots LLC

Parker Hannifin Corporation SolidProfessor

Tableau Software

Wago

Triangle Manufacturing Company TurnOne Graphics LLC. TurnOneGraphics.com Upverter Education

WestCoast Products Xilinx

Top Team Sponsors

(20 or more teams in 2021) Sponsors in this section are listed in descending order starting with the sponsor of the highest number of teams.

National Aeronautics and Space Administration (NASA)

DoD STFM

The Boeing Company Lockheed Martin Corporation

Intuitive Foundation Apple

NOKIA Bell Labs ABB Inc. S&P Global Foundation

Schneider Electric North

America Foundation

Motorola Solutions Foundation

Tennessee Valley Authority Bloomberg L.P. Pentair Foundation Aptiv Foundation

Analog Devices, Inc. NI

PTC. Inc.

Con Edison GF Healthcare ARM. Inc.

Mathworks, Inc. National Grid

"Thank you for all you do to make this incredible program available to kids. It has made an immeasurable difference opening STEM doors for my daughter and igniting a passion in her."

- FIRST parent and donor

Other Contributors

Banebots, LLC Bimba Manufacturing

Charmed Labs Diamond Technologies DNR Laboratories, LLC

Eaton's Bussmann Division ECIA - Electronic Components Industry Association

Havdonkerk Motion Solutions

HPE Automation Hydro Extrusion North America

Idle Loop Software IMI Precision Engineering

Kettering University MISUMI

Nason Piedmont Plastics, Inc. Robot Extrusions

ScreenSteps The Siemon Company Snap Action, Inc.

Sullins Connector Solutions

Techplex Labs

Sports Awards

Fikret Yuksel Foundation

Ford Motor Company General Motors Company

Comcast NBCUniversal Raytheon Technologies

BAE Systems Bayer Corporation

Abbott Fund Medtronic, Inc. Google

Picatinny Arsenal Rockwell Automation, Inc.

Oualcomm Incorporated Bosch

The 3M Company John Deere Pratt & Whitney Caterpillar, Inc. Collins Aerospace

Altice USA Boston Scientific Corporation

TE Connectivity Dow Leidos, Inc.

Bechtel Group Foundation

FIRST thanks our supporters and has made every effort to ensure complete and accurate listings. If we've made an error, please accept our apology and let us know at recognition@firstinspires.org.



FIRST Scholarship Program

We partner with colleges, universities, technical schools, and other organizations that make available scholarship opportunities specifically for FIRST participants and alumni. In FY2021, more than 200 FIRST Scholarship Providers made available exclusive scholarship opportunities to FIRST participants and alumni. Learn more at www.firstinspires.org/scholarships.

Thank you to the following organizations for supporting *FIRST* alumni in continuing their educations:

PLATINUM PROVIDER (\$500,000+)

Bahçesehir University Boston University Capitol Technology University Clarkson University Florida Institute of Technology Illinois Institute of Technology Instituto Tecnológico Autónomo de México (ITAM) Johnson & Wales University Kettering University Lawrence Technological University Massachusetts Institute of Technology (MIT) Milwaukee School of Engineering Olin College of Engineering Rensselaer Polytechnic Institute Rochester Institute of Technology Stevens Institute of Technology Syracuse University College of Engineering and Computer Science Tulane University University of Advancing Technology University of Rochester Webb Institute Williamson College of the Trades • Worcester Polytechnic Institute

GOLD PROVIDER

Yale University

(\$100,000 - \$499,999) College of the Atlantic Dr. Bart Kamen Memorial FIRST Scholarship Fund **ECPI University** Embry-Riddle Aeronautical University - AZ Embry-Riddle Aeronautical University - FL George Washington University Hampshire College Indiana University Bloomington McMaster University Merrimack College

Michigan Tech University North Central College Northeastern University Quinnipiac University Rose-Hulman Institute of Technology Trine University University of Cincinnati - College of Engineering and Applied Science University of Evansville University of Missouri - Kansas City Virginia Commonwealth University (VCU) School of Engineering Western New England University

SILVER PROVIDER (\$40,000 - \$99,999)

American Society of Mechanical Engineers (ASME) Auxiliary **BAE Systems** Bay Atlantic University Bosch Bradley University Case Western Reserve University College for Creative Studies Grand Valley State University Hallmark University Hanover College Harvey Mudd College Macquarie University Marguette University McKendree University Missouri University of Science and Technology

National Fluid Power Association (NFPA) New England College

Northwest Nazarene University Engineering

Nuts. Bolts and Thingamaiigs Foundation

Pacific University Raytheon Technologies Rice University Roanoke College

St. Clair College

SUNY Polytechnic Institute

Tecnológico de Monterrey University of Detroit Mercy University of Hartford College of Engineering, Technology, and Architecture

University of Minnesota Twin Cities/ PTC University of New Orleans

University of Northern Iowa University of Portland

University of Southern California Viterbi School of Engineering University of Texas Arlington University of Texas at Austin

Valparaiso University Woodie Flowers Memorial Grant .

BRONZE PROVIDER (\$20,000 - \$39,999)Adelphi University

Anoka Technical College Bay Atlantic University Campbell University Dunwoody College of Technology Hofstra University Iowa State University Make School NextEra Energy/Florida Power and Light Company Nipissing University Northwestern University The Ohio State University Oklahoma State University College of Engineering, Architecture and Technology Rutgers University Saint Martin's University Texas Tech University University of Alaska - Anchorage University of Maryland, A. James Clark School of Engineering University of Massachusetts

Lowell Engineering

University of New Hampshire

University of North Alabama

University of Missouri

Manchester

Vermont Technical College Whitworth University Xavier University

Bethany Lutheran College

BRASS PROVIDER (UP TO \$19,999) Actobotics/ServoCity

Boise State University Canadore College Cleveland State University The College of St. Scholastica Colorado Mesa University Columbia University Dematic • DePaul University Elbit Systems EWCP. Inc. • FIRST Alumni and Mentors Network at Michigan (FAMNM) FIRST Canada FIRST Chesapeake First Updates Now • **Gates Corporation** George Fox University Georgia Institute of Technology Grand Canyon University Green Girls STEM Foundation Indiana University-Purdue University Indianapolis (IUPUI) Kansas State University College of Engineering Lake Superior State University Louisiana State University Maryville University Mercer University Microchip Technology, Inc. Mineral Area College Minerva Schools at KGI

Molloy College

New York Institute of Technology

NH Governor's Cup Individual

and Technical University

Scholarship Award

North Carolina Agricultural

Oral Roberts University Oregon Institute of Technology Pace University, Seidenberg School of Computer Science and Information Systems Pennsylvania State University. College of Engineering Phil Clancy Memorial Scholarship Plymouth State University Queen's University The Rainbow STFM Alliance • Robert Morris University St. Louis Community College SME Education Foundation Society for the Advancement of Young Scientists (SAY) Society of Women Engineers (SWE) - Houston South Dakota School of Mines & Technology Southeast Missouri State University Southwestern Michigan College Sweet Briar College TKS The Knowledge Society Triangle Fraternity • University of Akron University of Connecticut University of Dayton University of Illinois at Urbana-Champaign - Grainger College of Engineering University of Kansas University of Massachusetts Amherst/ PTC University of Mississippi University of Nevada Las Vegas University of Southern Maine University of Tennessee, College of Engineering University of Texas at San Antonio University of Waterloo University of Windsor

University of Wisconsin, Madison

North Carolina State University

Ontario Tech University

NYU Tandon School of Engineering

University of Wisconsin Platteville Viterbo University Weber State University Western Carolina University Western Michigan University Western Technical College Western University York University

"After we became a Scholarship Provider, a group of FIRST alumni formed a new student club on campus - FIRST at Rice. The club is looking to build on the university's longstanding commitment to EDI by focusing their activities on equitable engagement of students from traditionally marginalized identities. We look forward to our continued partnership with FIRST to create pathways for more students from diverse backgrounds to pursue STEM degrees and careers."

 Yvette E. Pearson, Ph.D., associate dean of engineering, Rice University

Program Delivery Partners

FIRST is the vehicle by which young people of all backgrounds can discover a love of learning, hone their creativity. and unlock their full amazing potential. Our Program Delivery Partners work tirelessly to bring programs that keep STEM exciting and accessible to communities and classrooms around the world. This season was an unprecedented challenge for our partners, and they rose to meet it. The following key organizations in the field implement FIRST programs in their respective regions.

AI BANIA EDUAct •

ALGERIA Robot Éducatif Algérie*

ANDORRA Fundación Scientia •

ARGENTINA Playbots S.A.*

AUSTRALIA Macquarie University •••

AUSTRIA HANDS on TECHNOLOGY e.V. ••

A7FRBALJAN Mars Academy* ••

BFI GIUM Stichting Techniekpromotie ••

BOTSWANA Tshwane University of Technology/FIRST South Africa .

BRA7II Positivo • SESI ••

CANADA **ALBERTA** FIRST Robotics Society •••

FIRST Robotics British Columbia •••

BRITISH COLUMBIA

Society for the Advancement of Young Scientists •

Rothesay Netherwood School •

NEW BRUNSWICK

NEWFOUNDLAND AND LABRADOR FIRST Robotics Newfoundland and Labrador ••

NOVA SCOTIA Acadia University •

ONTARIO FIRST Robotics Canada ••••

OUÉBEC Robotique FIRST Québec ••

CHILE Fundación SparkTalents ••

CHINA Semia Limited •

CHINESE TAIPEL Kids Kingdom, Inc.

COLOMBIA Uniminuto ••

COSTA RICA Fundación STEAM ••

CROATIA Zavod Super Glavce • **CYPRUS** EDUAct ••

Epiteugma Training Center •

CZECH REPUBLIC Sdružení pracovníků DDM v CR •

DENMARK FIRST Scandinavia ••

DOMINICAN **RFPUBLIC**

Fundación para el Desarollo de las Ciencias y la Tecnología ••

ECUADOR Centro Campus* ••

FGYPT Techno Future Egypt ●●●

ESTONIA MTÜ Robootika ••

ESWATINI Tshwane University of Technology/FIRST South Africa • •

FAROF ISLANDS FIRST Scandinavia ••

FINI AND Robotiikka •

FRANCE West Side Robot Lab . Educabot •

GERMANY HANDS on TECHNOLOGY e.V. ••

GHANA CODERINA •••

GREECE EDUAct ••

GUATEMALA Computation Avanzada S.A.* • •

HONDURAS Fundación STEM Honduras*

HONG KONG, CHINA Semia Limited • • •

HUNGARY HANDS on TECHNOLOGY e.V. ••

ICFLAND FIRST LEGO League á Íslandi

INDIA InfinityX •

INDIA - NORTH India STEM Foundation ••

INDIA - SOUTH Edutech India Private Ltd. ••

INDIA - WEST Duck Learning ••

*Local Partner Representative

FIRST LEGO League Explore
 FIRST LEGO League Challenge
 FIRST Tech Challenge
 FIRST Robotics Competition



THANK YOU, FIRST VOLUNTEERS!

For over 30 years, FIRST volunteers have championed the game by cheering on our players, encouraging innovation and collaboration, and preparing them for the future. This season brought unprecedented challenges, and FIRST volunteers answered the call. They learned new systems, adapted to virtual events, and expanded their skillsets to deliver on the mission of *FIRST* and prepare the next generation of game changers.

We are proud to honor the 2020-2021 FIRST Volunteer of the Year Award recipients:

FIRST LEGO LEAGUE EXPLORE

Rick Ramhap (Long Island, NY), who partnered with School-Business Partnerships of Long Island to bring FIRST LEGO League Explore to Long Island.

Stephen Swartzentruber (Ontario, Canada), who was instrumental in training and recruiting volunteers, communicating with teams, and producing online events.

FIRST LEGO LEAGUE CHALLENGE

David Baran (Maryland), who ensured the virtual environment for competitions was optimized for the FIRST community to have the quality experiences they have at in-person events.

Sofia Ben souda (Morocco), who was national head referee and translated many community resources and shared them with teams in her area

FIRST TECH CHALLENGE

Thomas Barnette and Trey Woodlief (North Carolina), FIRST alumni who developed FIRST Tech Challenge Live, the official scoring software used at traditional and hybrid events, along with other resources for event management in collaboration with fellow volunteer developers.

FIRST ROBOTICS COMPETITION

David Greenley (Pennsylvania), who managed judges in conducting over 6,000 individual and team interviews and gave continued support to the judging process.

Peter Johnson (California), who has been a major contributor to WPILib, the software library provided for teams to write code for their robots.

INDONESIA

PT Edukasi Kreatifitas Anak/CK Education ••

IRFI AND

The Institution of Engineering and Technology (The IET) ••

FIRST Tech Challenge UK .

ISRAFI

FIRST Israel & Technion

ITALY

Fondazione Museo Civico di Rovereto

JAMAICA

Jamaica College Foundation •

JAPAN

FIRST Japan ••

JORDAN

Jubilee Center for Excellence in Education ••

KAZAKHSTAN

USTEM Robotics Kazakhstan/Central Asia Robotics Development Foundation* • • •

KENYA CODERINA ••

LATVIA MTÜ Robootika

I FBANON

Education and Technology Center ••

I FSOTHO

Tshwane University of Technology/FIRST South Africa

LITHUANIA

Robotikos Akademija ••

LUXEMBOURG

Stichting Techniekpromotie ••

MALAYSIA

Sasbadi Sdn Bhd ••

MÉXICO RobotiX ••

Explora, Descubre y Crea, A.C.

MOLDOVA

MTÜ Rohootika

MONGOLIA

Mongolia Robot Education Association •

MONTFNEGRO

Young Inventors of Montenegro •

MOROCCO Play Academy ••

NETHERI ANDS

Stichting Techniekpromotie •• STEAMUp •

NEW ZEALAND FIRST New Zealand Trust ••

NIGERIA CODERINA •••

NORWAY FIRST Scandinavia ••

OMAN ATLAB •

PAKISTAN STARfALL Foundation ••

PARAGUAY

Espacios de Ser S.A.*

PERU

Wernher Von Braun IEP SA • Edubots •

PHILIPPINES

FELTA Multi-Media, Inc.

POLAND

ALF Nauczanie Foundation ••

PORTUGAL

Evoluir21 ••

• FIRST LEGO League Explore • FIRST LEGO League Challenge • FIRST Tech Challenge • FIRST Robotics Competition

OATAR ATLAB ••

Texas A&M University Qatar •

REPUBLIC OF KOREA FEST (Federation for Education of Creative Science and Technology) •••

REPUBLIC OF NORTHERN MACEDONIA EDUAct ••

ROMANIA CRESTEM ••

Natie Prin Educatie Association •

RUSSIA

Robotics Laboratory "Future Engineers" • • •

SAUDI ARABIA ATLAB •••

Thaka Holding Co/BeSteam •

SINGAPORE Duck Learning ••

SLOVAKIA FIRST LEGO League Slovensko, o.z.

SLOVENIA Zavod Super Glavce •• SOUTH AFRICA

Tshwane University of Technology/FIRST South Africa

SPAIN Fundación Scientia

SWEDEN FIRST Scandinavia ••

SWITZERLAND HANDS on TECHNOLOGY e.V. ••

THAIL AND GAMMACO ••

The Prince Royal's College

TRINIDAD AND TOBAGO NIHFRST .

TUNISIA Edurobot Tunisia ••

TURKEY Bilim Kahramanlari

Bulusuyor (BKD) ••

Fikret Yüksel Foundation

UKRAINF Innovative Education Solutions ••

UNITED ARAB **EMIRATES** ATI AB

ATLAB and AUS •

UNITED KINGDOM

The Institution of Engineering and Technology (The IET) •• FIRST Tech Challenge UK •

UNITED STATES

ADVENTIST ROBOTICS LEAGUE

Adventist Robotics League ••

DODEA - EUROPE DoDEA - Europe

NATIONAL SOCIETY OF BLACK ENGINEERS National Society of Black Engineers ••

ALABAMA

FIRST in Alabama

ALASKA

Juneau Economic Development Council ••• FIRST Washington •

ARIZONA

Arizona State University •• Coconuts Robotics •

ARKANSAS

Science and Technology Group Inc.

CALIFORNIA - CENTRAL Clovis Unified School District ••

CALIFORNIA - LOS ANGELES

Alt-NFXT

I A Robotics

Southern California Robotics League ••

CALIFORNIA - NORTHERN Playing at Learning •••

CALIFORNIA - SAN DIEGO Matt Nilsen •

CALIFORNIA - SOUTHERN

Southern California Robotics League ••

COLORADO

Colorado FIRST

CONNECTICUT

NE FIRST ••••

DELAWARE

Delaware State University ••

First State Robotics •

FIRST Mid-Atlantic •

DISTRICT OF COLUMBIA

FIRST Chesapeake ••

James Madison University ••

FLORIDA

Tampa Bay Robotics •

FLORIDA - CENTRAL

Renaissance Jax, Inc.

FLORIDA - NORTHEAST

Renaissance Jax. Inc. ••

FLORIDA - NORTHWEST

DEFENSEWERX Inc. ••

FLORIDA - SOUTH

Green Mouse Academy ••

FLORIDA - WEST COAST

Hillsborough Community College ••

GEORGIA

Georgia FIRST •••

Georgia Institute of Technology •

GUAM

SIFA ••

HAWAII

Hawaii FIRST Robotics •••

IDAHO

Regents of the University of Idaho •••

ILLINOIS

Illinois FIRST Robotics •••

INDIANA

Indiana FIRST, Inc. Purdue Fort Wayne (PFW) •

IOWA

Iowa State University •• University of Iowa •

KANSAS

FIRST in Missouri .

KANSAS - CENTRAL

Oklahoma Science and **Engineering Foundation** (OKSEF) •

KANSAS - KANSAS CITY REGION

KC STEM Alliance

KANSAS - SOUTHWEST

Mid-America Air Museum/ City of Liberal ••

KENTUCKY

Northern Kentucky University ••

FTC in Kentucky, Inc. •

LOUISIANA

FIRST Louisiana-Mississippi • • •

MAINE

Robotics Institute of Maine •

NF FIRST .

MARYLAND

FIRST Chesapeake ••

Rockville Robotics, Inc. •

University of Maryland Baltimore County •

MASSACHUSETTS

NE FIRST • •

WPI Robotics Resource Center •

MIT Lincoln Laboratory .

Boston Tech Initiative, Corp.

MICHIGAN

FIRST in Michigan ••••

MINNESOTA

High Tech Kids •••

MISSISSIPPI

Robotics Alliance of Mississippi ••

Center for Mathematics and Science Education/The University of Mississippi •

MISSOURI

FIRST in Missouri •

MISSOURI - CENTRAL

Camdenton R-III School District ••

FIRST in Missouri

MISSOURI - EAST

St. Louis Community College - Florissant Valley ••

FIRST in Missouri

MISSOURI - KANSAS CITY

KC STEM Alliance

MONTANA

College of Engineering, Montana State University .

Ed Huth •

NEBRASKA

University of Nebraska - Lincoln 4-H Youth Development ••

NEVADA

FIRST Nevada

NEW HAMPSHIRE

NE FIRST ••••

FIRST New Hampshire Robotics • • •

NEW JERSEY

FIRST Tech Challenge New Jersey •

FIRST Mid-Atlantic •

NEW JERSEY - NORTH

MOREA - Mount Olive Robotics Education Association ••

FIRST Mid-Atlantic ••

NEW JERSEY - SOUTH

Rowan University ••

NEW MEXICO

Land of Enchantment Robotics • • •

FIRST in Texas

NEW YORK - EXCELSIOR

Mohawk Valley Community College •

NEW YORK - FINGER LAKES

University of Rochester ••

NEW YORK - LONG ISLAND

School-Business Partnership of Long Island, Inc.

NEW YORK - MID-HUDSON VALLEY

Hudson Valley FIRST LEGO League ••

NEW YORK - NEW YORK CITY NYC FIRST •••

NEW YORK - POTSDAM

Clarkson University •

NORTH CAROLINA

North Carolina A&T State University ••

FIRST North Carolina ••

NORTH DAKOTA

Bismarck Career Academy •

University of North Dakota. School of Engineering & Mines ••

OHIO

WPAFB Educational Outreach •••

OKLAHOMA

Oklahoma Science and **Engineering Foundation** (OKSEF) •••

Southwest Oklahoma State University •

OREGON

Oregon Robotics Tournament & Outreach Program •••

FIRST Washington •

PENNSYLVANIA

Pennsylvania FIRST •

PENNSYLVANIA - CENTRAL

Appalachia Intermediate Unit 8 ••

PENNSYLVANIA - EAST

FIRST Mid-Atlantic ••

Capital Intermediate Unit 15 •

EASTERN PENNSYLVANIA

FIRST Mid-Atlantic •

PENNSYLVANIA - NORTHWEST

Penn State Erie. The Behrend College •

PENNSYLVANIA - SOUTHWEST

BrainSTEM Learning ••

PUERTO RICO

Eureka Enrichment Services, Inc.

RHODE ISLAND NE FIRST •

New England Institute of Technology •

Rhode Island School of the Future ••

SOUTH CAROLINA

South Carolina FIRST LEGO League and Robotics Education, Inc.

South Carolina Robotics **Education Foundation** **SOUTH DAKOTA**

EmBe ••

TENNESSEE

Tennessee FIRST

TENNESSEE - CHATTANOOGA (NORTH GEORGIA)

Tennessee Valley Robotics ••

TENNESSEE - EAST

Tennessee Tech University ••

TENNESSEE - WEST

University of Memphis and Herff College of Engineering •

The Children's Museum of Memphis •

TEXAS

FIRST in Texas

TEXAS - CENTRAL FIRST in Texas •••

TEXAS - EAST

FIRST in Texas ••

San Jacinto College •

TEXAS - NORTH

DFW Technology and Education Council •

FIRST in Texas ••

TEXAS - PANHANDLE FIRST in Texas ••

TEXAS - SOUTH

FIRST in Texas •••

TEXAS - WEST

The University of Texas at El Paso - College of Engineering ••

FIRST in Texas

UTAH

Weber State University, College of Applied Science and Technology •••

Southern Utah University •

VERMONT

NE FIRST •

Norwich University •

University of Vermont •

VIRGINIA

FIRST Chesapeake ••

James Madison University ••

WASHINGTON

FIRST Washington ••••

WEST VIRGINIA

Fairmont State University •••

WISCONSIN

BadgerBOTS Robotics Corporation ••

Milwaukee School of Engineering •

WYOMING

Natrona County School District •••

URUGUAY Plan Ceibal

VIFTNAM Viet Tinh Anh JSC ••

ZIMBABWE

Tshwane University of Technology/FIRST South Africa ••

2021 WOODIF FLOWERS AWARD RECIPIENT



Matt Fagen, Mentor, FIRST Robotics Competition Team 4253 "Raid Zero," Taipei

Dr. William Murphy founded The Woodie Flowers Award (WFA) in 1996 to recognize mentors who lead, inspire, and empower using excellent communication skills - starting with Dr. Woodie Flowers, FIRST Distinguished Advisor, who defined what it means to be a mentor and an effective communicator in the art and science of engineering and design. Following in Woodie's footsteps, WFA winners serve as valued advisors to FIRST.

The 2021 WFA was awarded to Matt Fagen, director of robotics at Taipei American School and mentor to FIRST Robotics Competition Team 4253 "Raid Zero" from Taipei. He has mentored the team to success for a decade, and also established a STEM center there. With a degree in physics and another in music composition, Matt is the consummate communicator with words. music, and actions. The students from Raid Zero describe their mentor as "the conductor that breathes life into our orchestra ... made of innovators, thinkers, designers, programmers, engineers, and dreamers."

Financials

In FY2020, the COVID-19 pandemic caused the suspension of our season and cancellation of FIRST Championship, which significantly decreased our revenues, leading to an operating deficit for the first time in over 17 years.

In FY2021, we focused our financial efforts on sustaining our community and participation in our programs through investments in key program modifications, remote activities, hybrid event solutions, and supporting tools and services. Unfortunately, reduced participation resulting from delayed pandemic recovery and lingering impacts did cause us to incur a financial loss for the year. Similar to FY2020, we were able to continue to strategically

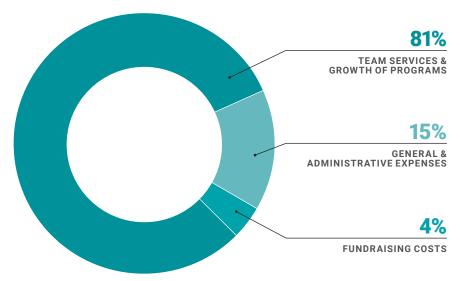
See Financial Statements, page 38.

manage our expense footprint while simultaneously pivoting and investing in needed program modifications, as well as several key initiatives such as our Youth Protection Program, Information Technology, Program Evaluations, Diversity & Inclusion Program, and Education Initiative.

Support from generous contributors remained strong, as many individuals, small businesses, corporations – including over 200 of the Fortune 500 companies - and foundations maintained or increased their support. In addition, many of our contributors also provided significant support in the way of unrestricted donations, providing FIRST with important flexibility to manage the pandemic

impacts and address our most important business needs. This contributed support continued to provide meaningful experiences to hundreds of thousands of youth engaged worldwide in the FIRST progression of programs.

As noted in the pie chart below, and in keeping with long-time practices, FIRST continues to apply the maximum percentage of funds possible to directly benefit FIRST participants. Despite disciplined cost controls, we experienced a slight increase in G&A expenses over previous years due to reduced program participation. Included within the modest G&A expenses are several significant investments in infrastructure enhancements, including those noted.



Charity Navigator Star Rating

This rating certifies our continued commitment to accountability. transparency, and sound fiscal management.



This Charity Navigator rating represents Form 990 data from 2019, the most recent rating available at $\underline{www.charitynavigator.org/ein/222990908}.$ More recent filing data is available, but Charity Navigator has not factored it into their score due to COVID's effects.

Statements of Activities

	JUNE 30, 2021	JUNE 30, 2020
Revenues and other support:		
Program registration fees	5,789,688	15,091,513
Contributions and grants	4,343,936	11,896,431
Other income	596,476	1,017,589
Special event income, net of expenses	-	424,659
Net assets released from restrictions	36,703,128	39,856,978
Total revenues (losses) and other support	\$ 47,433,228	\$ 68,287,170
Expenses:		
FIRST Program Expenses	38,807,648	57,950,115
Net cost of building space occupied by unrelated not-for-profit organizations	245,537	320,651
General, administrative, and supporting services	6,926,858	8,330,803
Fundraising and Development	2,090,659	2,400,224
Total expenses	\$ 48,070,702	\$ 69,001,793
Operating surplus (deficit)	(637,474)	(714,623)

Statements of Financial Position

	JUNE 30, 2021	JUNE 30, 2020
Assets:		
Cash and cash equivalents*	35,631,704	42,609,063
Short-term investments*	16,500,000	8,250,000
Pledges, receivables, program supply inventory, and other assets	11,416,654	15,932,819
Net property, plant, and equipment	4,517,153	5,221,972
Total assets, end of year	\$ 68,065,511	\$ 72,013,854
Colonia de la co		
Liabilities and net assets:		
Total liabilities, end of year	\$ 8,544,094	\$ 9,133,145
Net assets:		
Unrestricted	28,040,103	28,677,577
Temporarily restricted	31,481,314	34,203,135
Total net assets, end of year	\$ 59,521,417	\$ 62,880,712
Total liabilities and net assets, end of year	\$ 68,065,511	\$ 72,013,857

For each of the two fiscal years summarized above, FIRST received unmodified (unqualified) opinions from its independent auditor, BerryDunn.

*NOTE: The cash and short-term investments are comprised of both unrestricted funds and donor temporarily restricted funds. The increase in restricted funds includes pre-payments of future restricted sponsorships from certain grantors. The total liquid assets balance available to FIRST, for operating purposes, at June 30, 2021, is equivalent to approximately seven months of FIRST operating expenses.

The financial information presented here is condensed and does not include the value of all donated services and materials. Audited Financial Statements (AFS) are readily available on our website at www.firstinspires.org under "About/Annual Report & Financials."

Leadership

BOARD OF DIRECTORS

Robert K. Ortberg CO-CHAIR

Former Chairman & CEO, Rockwell Collins and CEO, Collins Aerospace

Donald Bossi co-chair & SECRETARY

Technology Venture Partners, General Partner

Richard L. Clemmer co-chair

Former Chief Executive Officer & President, NXP Semiconductors

Dr. Laurie Leshin VICE CHAIR

President, Worcester Polytechnic Institute

Dr. Vincent Wilczynski TREASURER

Deputy Dean, Yale School of Engineering & Applied Science & James S. Tyler Director of the Center for Engineering Innovation & Design, Yale University

Dean Kamen FOUNDER

President, DEKA Research & Development Corporation

John E. Abele

Founding Chairman, Retired, Boston Scientific Corporation

Ursula Burns

Senior Advisor, Teneo Ltd.

Leanne G. Caret

President & Chief Executive Officer, Boeing Defense, Space & Security

Dr. Robin N. Coger

Dean, College of Engineering, North Carolina Agricultural and Technical State University (A&T)

Karen Horting

Executive Director & CEO, Society of Women Engineers

Dr. Paul E. Jacobs

Chairman & Chief Executive Officer, XCOM Labs, Inc.

Scott McKay

Former Executive Vice President & Chief Strategy Officer, Genworth Financial

Blake Moret

Chairman & CEO, Rockwell Automation

David Siegel

Co-Chairman, Two Sigma

Dr. Melissa Smith

Staff User Experience Researcher, Google/YouTube

Raj Subramaniam

President, Chief Operating Officer and Director, FedEx Corp.

LEADERSHIP CONTINUED

HONORARY DIRECTORS

J.T. Battenberg III

Chairman & Chief Executive Officer, Retired, Delphi Corporation

François J. Castaing

Executive Vice President, Retired, Chrysler Corporation

L. John Doerr III

Chairman, Kleiner Perkins Caufield & Byers

Gary L. Tooker

Chairman of the Board, Retired, Motorola, Inc.

James R. Utaski FIRST CHAIRMAN: 2000-2002 Corporate Mergers & Acquisitions Officer, Retired, Johnson & Johnson

SENIOR ADVISORS

Dr. Shirley Ann Jackson

President, Rensselaer Polytechnic Institute

Kjeld Kirk Kristiansen

Deputy Chairman of the Board, LEGO Foundation & KIRKBI A/S

Dr. William P. Murphy, Jr.

Founder, Cordis Corporation

Steve Sanghi

Chairman of the Board, President & Chief Executive Officer, Microchip Technology, Inc.

The Honorable Jeanne Shaheen

United States Senator, New Hampshire

Josh S. Weston

Honorary Chairman, Automatic Data Processing, Inc.

EXECUTIVE ADVISORY BOARD

Dr. Woodie Flowers (1943-2019)

FAR CHAIR EMERITUS & DISTINGUISHED ADVISOR

Kevin Ross CO-CHAIR Founder, FIRST Washington

Heidi Sipe co-chair

Superintendent, Umatilla Public Schools

Charlie Ackerman

Senior Vice President - Human Resources North America. Robert Bosch LLC

Ray Almgren

Chief Operating Officer, Swift Sensors, Inc.

Gail Alpert

President, FIRST in Michigan

Susie Armstrong

Senior Vice President of Engineering, Qualcomm

Mark Breadner

Co-Founder and Former President, FIRST Canada

Cosema (Connie) Crawford, P.E.

Director of P3 Rail, İtinera Infrastructures and Concessions

Greg Hale

Vice President & Chief Safety Officer, Walt Disney Parks & Resorts

Luan Heimlich

Manager, Technology-based Outreach, Department of Engineering, Macquarie University

Jahmy J. Hindman

Chief Technology Officer, Deere & Company

James E. Heppelmann

President & Chief Executive Officer. PTC

Kent H. Hughes

Public Policy Scholar, Woodrow Wilson International Center for Scholars

Esben Stærk Jørgensen

President, LEGO® Education

David Lavery

Program Executive for Solar System Exploration, NASA

Ceci Neumann

Independent Law Practice Professional

Cate Prescott

Global Vice President of Human Resources, NI

Nancy Ouan

Senior Vice President & Chief Technical Officer, The Coca-Cola Company

FIRST LEADERSHIP TEAM

Chris Moore

Chief Executive Officer, FIRST

Chris Rake

Executive Vice President and Chief Operating Officer

Mark Giordono

Vice President, Development & Alumni Relations

Frica Newton Fessia

Vice President, Global Field Operations

Danielle Pliska

Vice President, Finance

Ron Falcone

Chief Sourcing Officer

Amy Lynn Hunt

Chief People Officer

Dr. Janell N. Catlin

Senior Director, Equity, Diversity and Inclusion

Nancy Boyer, Ph.D.

Senior Director, Evaluation and Impact

Brooke Blew

Senior Director, Marketing and Communications

Chuck Harris

Senior Director, IT and Software Development

Learn more about FIRST Leadership at firstinspires.org/about/leadership

FIRST® is a robotics community preparing young people for the future.

VISION

"To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders."

- Dean Kamen, FIRST Founder

MISSION

To inspire young people to be science and technology leaders and innovators, by engaging them in exciting mentor-based programs that build science, engineering, and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

IMPACT

For three decades, FIRST participants have developed self-confidence in STEM, meaningful friendships, and valuable, real-world skills that open pathways and help young people build a better future. FIRST programs are proven to encourage students to pursue education and careers in STEM-related fields, but they also inspire kids to become leaders and innovators in any industry.



200 Bedford Street, Manchester, NH 03101 + 800.871.8326 | www.firstinspires.org

FIRST, the FIRST logo, FIRST Robotics Competition, FIRST Tech Challenge, Coopertition, Gracious Professionalism, Sport for the Mind, INFINITE RECHARGE, ULTIMATE GOAL, and FIRST GAME CHANGERS are trademarks of For Inspiration and Recognition of Science and Technology (FIRST), LEGO, MINDSTORMS, DUPLO, and the SPIKE logo are trademarks of the LEGO Group. FIRST LEGO League, RePLAY, and PLAYMAKERS are jointly held trademarks of FIRST and the LEGO Group. All other trademarks are the property of their respective owners. © 2021 FIRST. © and 1221 Lucasfilm Ltd. All rights reserved. F1102