



ATX Robotics, Inc.

2020 ANNUAL REPORT

Letter from the President

Many organizations experienced disruptions this year with the threat of COVID-19, and ATX Robotics was not immune. Despite these challenges, we made a gigantic step toward stabilization and growth with the move into a new shop space and continued to provide STEAM activities to students who would otherwise not have access.

It is with great pride and hope for the coming season that we close out our fourth year of ATX Robotics. We continue to excel at providing opportunities for all students to participate in robotics, not just those who attend large, well-funded high schools.

Since ATX Robotics' initial robotics team in a garage, we have grown to sponsoring two separate and diverse STEAM programs serving students ages 6-18, as well as moving our Howdy Bots program into a 4000 sq. ft. dedicated workshop.

Tomorrow's leaders will be those who feel equally at ease with and conversant in technology, science, and business. ATX Robotics nurtures the symbiotic relationship between these three areas and empowers kids to know that: they can fix it, they can figure it out, they can experiment, they can look it up, they can collaborate, they can design it, they can build it, and they can understand it.

As we look ahead to 2021 with these goals in mind, I invite you to join us in our mission to inspire our next generation of innovators and entrepreneurs.

Evan Marchman

Evan Marchman, President



Our Mission

The mission of ATX Robotics is to provide quality extracurricular programs to pre-college students of all ages in the Austin area, regardless of their educational status or ability. Our organization is particularly focused on providing access to robotics competition teams to students who are otherwise ineligible to participate due to not being enrolled in a traditional school.

We provide students the opportunity to work shoulder-to-shoulder with volunteer professional engineers and businesspeople to collaborate in hands-on activities designed to foster interest and to promote education in science, technology, engineering, art, and mathematics (STEAM).

ATX Robotics is organized as a nonprofit in the State of Texas and is a recognized 501(c)(3).



Program Summary

- Howdy Bots:
 - Students each logged over 319 hours of hands-on STEAM learning before our season was cut short by COVID-19
 - Exposed thousands of students to STEAM and STEAM careers during our off-season outreach
 - 39% of our students are more interested in a STEAM career after participating in Howdy Bots
- North Austin Science Alliance (NASA):
 - Strong showing in Science Olympiad, Science Bowl and Science Fest events



Financials

Statement of Activities - Year Ended May 31, 2020

Net Assets (as of June 1, 2019):	\$39,290
Fixed Assets	\$4,788
Revenues:	
Contributions – Corporations	\$34,240
Contributions – Individuals	\$26,735
Grants	\$16,500
Membership Dues	\$9,359
Other Income ¹	\$96
Total Revenues:	\$86, 930
Total Revenues & Assets:	\$131,008
Expenses:	
Event Registration	\$6,900
Parts/Equipment	\$23,700
Team/Student Marketing Projects ²	\$3,215
Advertising/Marketing	\$2,600
Supplies ³	\$968
Travel & Meals	\$4,994
General Overhead ⁴	\$16,677
Fundraising Expense ⁵	\$589
Miscellaneous ⁶	\$3,035
Depreciation ⁷	\$798
Total Expenses:	\$63,476

¹ Includes interest

² Includes team t-shirts, Howdy Bots' pit

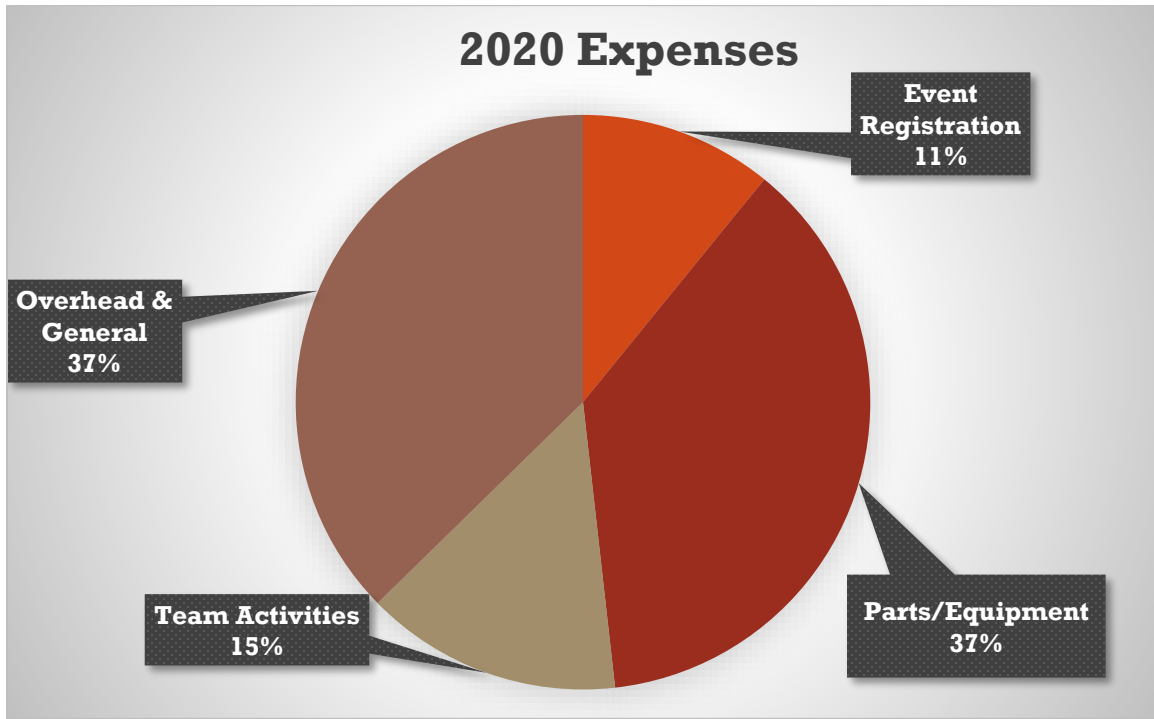
³ Includes postage and printing

⁴ Includes insurance, rent, utilities

⁵ Includes PayPal fees

⁶ Includes bank fees and one-time shop setup costs

⁷ Trailer depreciation



Statement of Financial Position - Year Ended May 31, 2020

Assets:	
Cash	\$63,739
In-kind trailer (equipment)	\$3,990
Total Assets:	\$67,729
Liabilities:	
Accounts Payable	\$199
Total Liabilities:	\$199
Total Liabilities and Assets:	\$67,530

Our Accomplishments

Howdy Bots FRC Team 6377

Prior to the COVID-19 related stay-home orders issued in March 2020, the Howdy Bots FRC Team 6377 had been having a successful fourth year season.

We visited homeschool and community school groups targeting K-12 students where kids were able to interact with the robot and hear about our team, *FIRST*, and STEAM. We attended large events such as Dell STEM Night at the Round Rock Express baseball game as well as smaller demos at libraries. Our favorite event of the year was volunteering at the Austin Sunshine Camp for at-risk youth and sharing our knowledge of STEAM.



Off-season also included a focus on fundraising efforts and connecting with our local community. All students spent time helping to organize our second annual, old-fashioned telethon. Students created video content, hosted the live stream and answered donor phone calls. Most of the kids even found producing the Howdy Bots Telethon was one of their favorite off-season activities, and that they gained a lot of confidence from the interactions, as well as new skills. We were able to bring in \$17,000, shattering our fundraising goal of \$12,000, and the students gained an enormous amount of valuable experience.



The Howdy Bots attended two off-season competition events, competing with our 2019 competition robot “Outlaw”, and we tested out new drivers. We were the proud winners of the

STEM Gals Tournament, one of the events at the NTX Tournament. Between these two events and all our outreach events, we recruited several new students. The rest of our off-season months were spent bringing our new students into the Howdy Bots family, training them on safety and tools, and getting everyone ready for FRC Kick-off Day.

January 4, 2020, finally rolled around and it was Kick-off Day, the day FRC teams from all over the world come together to learn what the new game is going to be. As is

traditional, our team met with several other area teams at Dripping Springs High School to watch the big game reveal streamed live.

From the moment the new game was revealed we only had about seven weeks to design and build our 120 lb. competition robot before our first event. This was the first year that we did not have to seal it in a bag at six weeks, a new rule change for *FIRST*. Before COVID-19 prevented us from continuing



to meet, our students logged 319 hours of STEAM “learning and doing” time. We even ate meals together at the shop, so we could keep working. Not only were our technical teams working hard, but our business teams were putting together a stellar pit and marketing strategy. By our first competition in Greenville on Feb 28 & 29, we had a fully functioning robot ready to go.

The Greenville District Competition was a “Week 1” competition. We had stretched ourselves to be ready in time for such an early event. We performed well and made it to the elimination rounds as an alliance captain. In the end, we were Finalists, but we were also pleased and proud to win the Entrepreneurship Award recognizing our business efforts.

With the threat of COVID-19 looming, it turned out that we would be among the few teams worldwide who had been able to field a robot and compete this year because Week 3 competitions were all cancelled mid-event on March 12. Our next competition would have been during Week 4.



Needless to say, our students and mentors were disappointed, but counted ourselves fortunate. Since the issuing of the Stay-Home orders in Austin, we have conducted team meetings virtually and declared ourselves in “offseason” early. It is not the same as meeting in person, unfortunately, but this has allowed the students to continue working on projects they are interested in. Our mechanical and programming students have been designing a differential swerve drive, our

business students have been preparing for the next telethon this fall, and our team as a whole has been creating a comprehensive merit badge system called “Earn Your Spurs”

that will allow us to more easily integrate new students into the team and allow veteran students to increase their skill levels. We will slowly be reopening to small in-person meetings soon.

In our most exciting news of the year, Howdy Bots moved into a new workshop space in April. It remained a surprise from the kids until our virtual End of Year Party on April 25th. Our new space is 4000 sq ft and located conveniently on Mo Pac Expressway. With 19 students and 10 mentors at the Marchman house 29+ hours a week, things had gotten very cramped. We will now be able to expand and serve all students who are interested in joining.

We cannot thank our sponsors, donors, and parent supporters enough for making this year possible, even though it was shorter than normal. We plan to resume full in-person meetings as soon as it is allowed and safe to do so. We look forward to seeing what next year has in store for us.

AWARDS WON

2020 Greenville District Finalists
2020 Greenville District Entrepreneurship Award
2019, NTX Tournament Gracious Professionalism Award
2019, NTX Tournament Semifinalists
2019, NTX STEM Gals Tournament winners
2019, Texas Robotics Invitational Semifinalists
2019, Texas Robotics Invitational Girls Drive Winner



EVENTS

2020 *FIRST* in Texas Greenville District Competition
2019 NTX Tournament
2019 Texas Robot Invitational

VOLUNTEER EVENTS / COMMUNITY IMPACT

2020 Mentor to rookie Team 8088

2019 ChickTech demonstration @ Texas School for the Deaf

2019 Python Club @ Little Walnut Creek Library

2019 Howdy Bots Telethon

2019 Hot Science Cool Talks @ University of Texas, Public STEM program-Part of the opening activities for 600 attendees.

2019 Time Machine Summit with Spark Cognition

2019 Joe Lee Johnson Elementary demo for 5th graders-public charter school

2019 Abbot Employee Giving Kickoff campaign

2019 Microsoft Demonstration

2019 Cedars Next Generation STEM High school demonstration, Grades 8-12- public charter school

2019 Round Rock Library Space Science Stations

2019 Solidworks Users Group demo

2019 Round Rock Express (baseball) Demo

2019 SISU Devices visit

2019 Austin Sunshine Camp (for underprivileged kids) volunteers with Spark Cognition

2019 Guadalupe SpaceX Hyperloop University of Texas competition team visit

2019 2nd Cedars Next Generation STEM High School demonstration 2019 Jubilee

Academy-Wells Branch Demonstration-public charter school demonstration to 200 3rd-5th graders

2019 PEACE co-op Demonstration- homeschool co-op demonstration

2019 Mentored rookie Team 7621

2019 Homeschool Happenings Demonstration

2019 Microsoft Demonstration

North Austin Science Alliance (NASA)

This season marked our full transition out of an “enrichment” club to a 100% competitive Science Olympiad (SO) group. All students ages 11 and up are expected to compete in Science Olympiad competitions. The transition was bumpy at times, but focusing only on Science Olympiad allows the kids to begin prep during the summer, know what to expect during the season, and offers more efficient budget allocations as the coaches plan for materials and supplies based on which events are offered each season.

Our Elementary Division has been streamlined to focus on young siblings of our older middle and high schoolers, and to limit non-sibling new members primarily to students ages 9 and 10. This allowed us to downsize the group for a greater instructor-to-child ratio, control expenses, and offer more in-depth activities. The group had multiple engineering and physics classes that included building



parachutes and roller coasters as well as studying the science of sound, material properties, and density. Biology was represented with flowers and seed dispersal, and human anatomy was a recurring subject with classes on respiratory, urinary, digestive, musculoskeletal, and circulatory systems. Earth Science studies included earthquakes and several meteorology classes. This proved to be a successful model for the younger kids and we plan to continue this format going forward.

Our middle and high school group meetings were structured around Science Olympiad competition preparation, which included study workshops, practice tests, and activities geared specifically to individual Olympiad events.



The middle school group (hereafter referred to as the B Division, which is how SO categorizes grades 6 - 9), began their SO prep during the summer, choosing their events and pairing up with partners and parent coaches to begin studying. Less than half the team were returning veterans so there was quite a

bit of ramp-up for the newcomers. The B Div. team competed in 4 competitions. The kids worked hard and our small team ranked in the top half or better at nearly all the competitions, including excruciatingly competitive ones that saw championship schools from all over the country.

This season also marked NASA's first official High School Science Olympiad team (Division C). With only 3 veteran 10th graders and 5 new incoming 9th and 10th graders, this young team really pulled together and gave it their best shot. They earned top half and top 10 finishes competing against schools fielding multiple teams twice the size of ours. More importantly, the busy teens honed their collaborative and time-management skills and showed real grit by taking on extra events to boost their chances.

Another area of interest for some of our teens was the Girls Go CyberStart Cyber Security Challenge competition dealing with fields such as cryptography, digital forensics, and open-source intelligence gathering. Although NASA only had limited participation before the season was cut short, our solo competitor has advanced to the National Championship. Next year the event may allow all students regardless of gender, and we hope more of our high schoolers show interest going forward. Like everyone else, our team was greatly affected by the pandemic shutdowns, which resulted in the cancellation of the remaining Science Olympiad competitions as well as in-person meetings.

At this point we are unsure of what next season might hold but are grateful that our team families are healthy and staying safe. We hope for the best over the next few months and look forward to getting back into team activities, whatever form those may take.



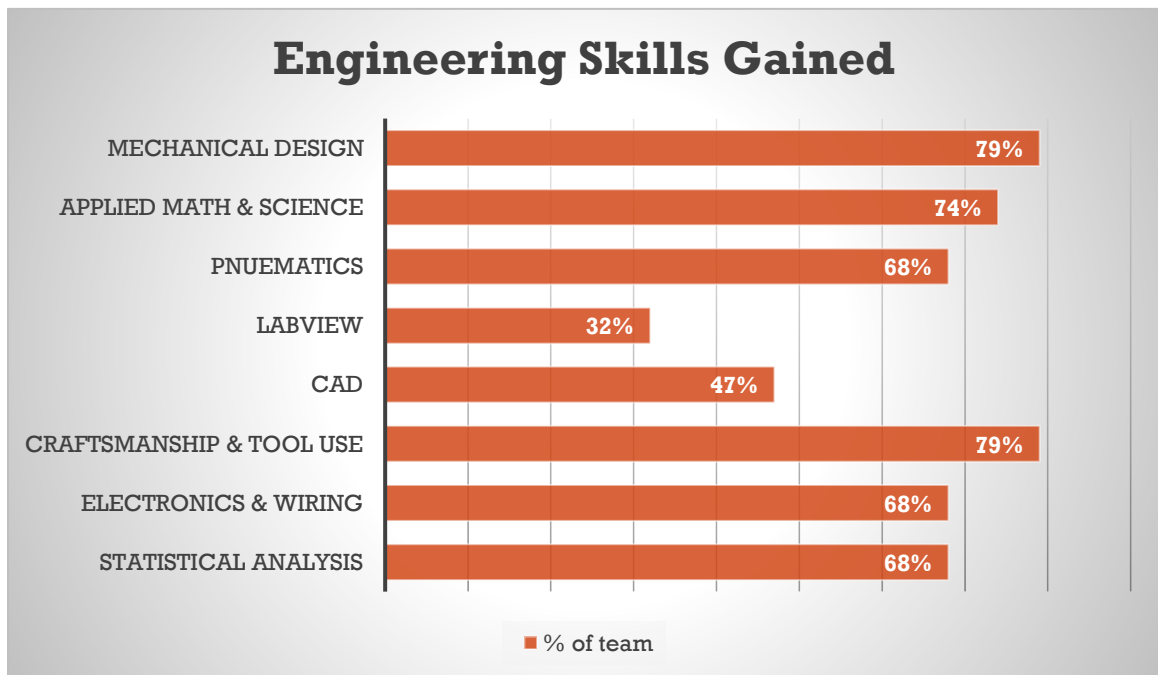
Impact: Howdy Bots

At the beginning and end of each season, Howdy Bots students evaluate their experience through our Entrance and Exit Surveys. Results provide the mentors and the ATX Robotics board with useful feedback regarding areas of success, knowledge gained, and opportunities for improvement in each program.

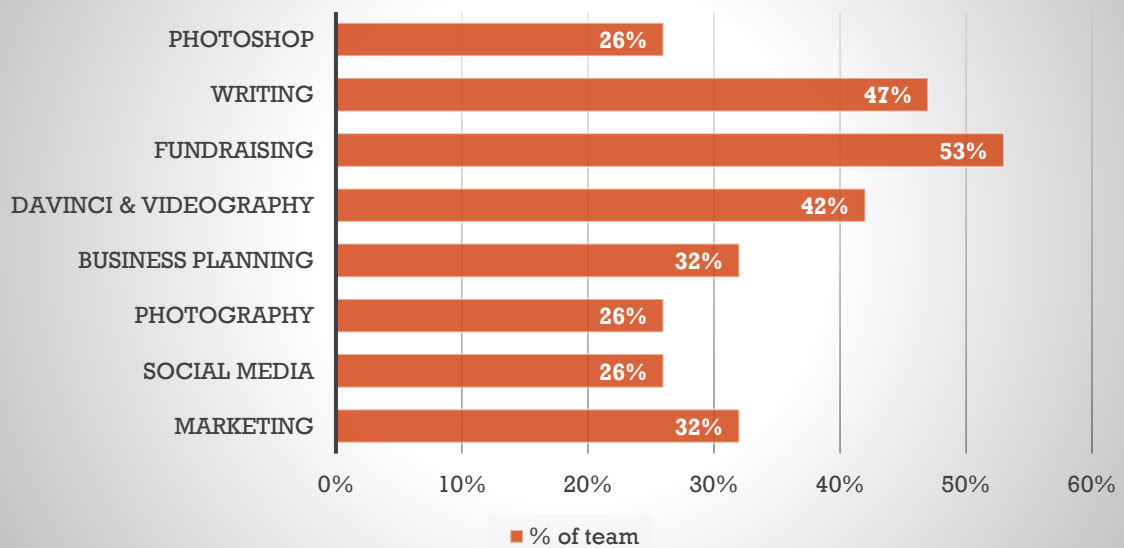
Full survey results are available upon request. Here are some highlights.

19 students averaged 319 hours of STEAM learning each during the 11 weeks of our busy season before it was cut short by COVID-19. That's not counting any extra meetings, open shop hours, or homework.

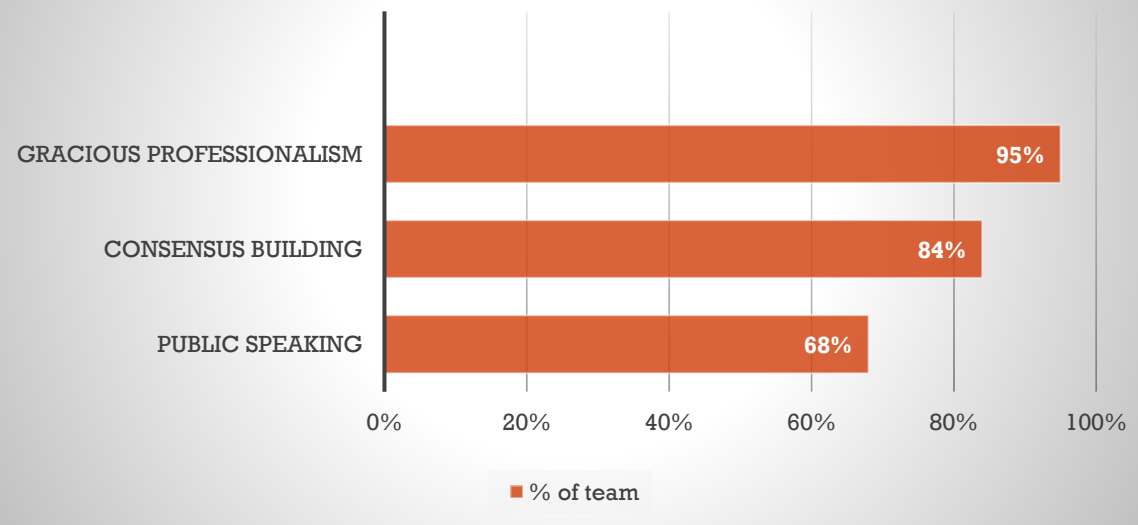
Howdy Bots is intense, hands-on, and a huge labor of love for the mentors and students alike.

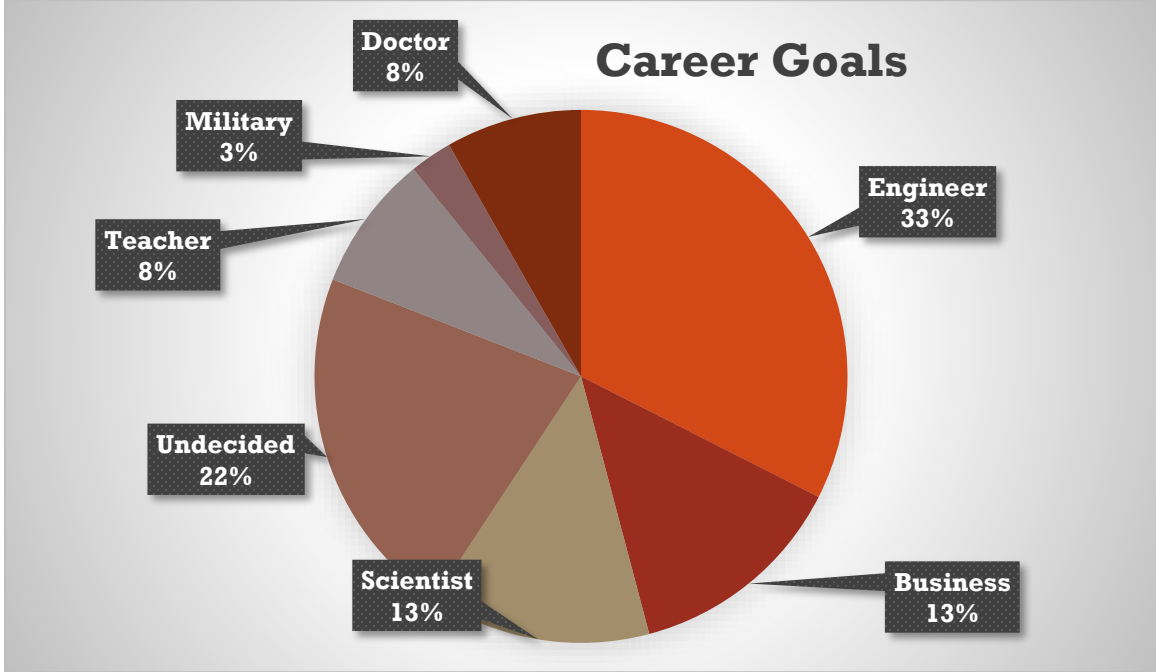


Business & Marketing Skills Gained



Soft Skills Gained





From the students:

“I have gained skills in almost every area I can think of and have completely changed my mindset and goals relating to STEAM.”

“I was able to feel more confident taking charge and committing to projects. I learned a lot about the process of designing and building that I did not have much experience in.”

“It’s a safe place to learn, like, I could mess up and try again and get help so that the next time I do something I do it right.”

“This program inspired me to become a computer science major because it gave me a real life experience of what happens in the real world.”

Howdy Bots Sponsors

“Above the Law”: Multi-year commitment



Sheriff: \$10,000+



Marshall: \$5,000-\$9,999



Deputy: \$2,000-\$4,999



Rancher: \$500-\$1,999



Stores #2991 & #4163



H-E-B TOURNAMENT
OF CHAMPIONS

DONORS

"Thank you for helping us grow Year 4!"

Jennus & Rosanne Burton

Rachel Chamberlain

Cindy Lo

Abbey Tomaszewski

Lisa Griggs

Gay Thomas

Shawn Weisfeld

Dawn Clark

Lou Ann Corcoran

Karen Walker

Jim & Margie Lindsey

Cheryl Quartaro

Michelle Kindig

Kalyan Karri

Sheila Smith

Patricia Spivey

Edward Nagel

Mark Eadie

Pamela Havel-Moser

Kiran Adaru

Valeriy Shirokov

Jeff & Sharon Hobbs

Andrew Balinsky

Shankar Subramaniyan

John Nix	Jennifer Harrand	Erik Schultz
Girish Pillai	Janie Skiles	Ronnie & Joy Ozymy
Brian Watson	Cherie Kitterman	Carol & Ronnie Jones
Marc Airhart	Susie Nagel	Susan Salch
Jayne Allen	Bettye & David Hobbs	Chris & Tara Cherry
Robin Owens	Jennifer Worley-Kvinta	Sandy Hendrix
Lydia Pena	Jeffrey Lathan	Christina Twing
John & Cathy Pearson	Michael Langlinais	Matthew Philbrook
Bob Watson	Robert Shelton	Amy Sievers
Riley & Diann Marchman	Curtis McNamee	Inez Vanderburg
Jeri Russel	Claire Perilloux	Mark & Carrie Lindsey
Patricia & Stan Gordon	Angelica Lundquist	Alyssa Hedge
Susan & Erling Holey	Paige Suffredini	Catherine Robinson
Kimberly Bui	April Auguren	Jason Habingreither
Susan Wiley	Tommy Tomaszewski	Laura Tomaszewski
Kevin Lam	Tyler Olds	Michael Blume
Rebecca Kitzmiller-Moore	Mackey Cappleman	Suresh Bachu
Jami Blume	Junellen Cappleman	Jim Loughlin
Miles Bradon	Pat Kelly	William Nagel

Board of Directors

ATX Robotics is overseen by a Board of Directors that is actively engaged in strategic planning for the growth of Howdy Bots and the addition of more teams, in relationship development, and in community involvement with the aim of promoting STEAM. All of the board members are leaders in their respective fields and organizations, representing engineering, business, and education.



Evan Marchman founded ATX Robotics in 2016, and is the President of ATX Robotics. Additionally, he serves as the Head Coach for the “Howdy Bots” and lead technical mentor. He has worked as an engineer for over twenty years in the Austin tech community and is currently Director of Hardware and Validation at Uhnder. Mr. Marchman holds a Bachelor of Science degree in Electrical and Audio Engineering from the University of Miami, Coral Gables, FL, and has three children who have been previously homeschooled and currently attend public school and Austin Community College.



Ezana Haile is the Secretary for ATX Robotics and currently serves as a technical mentor for the Howdy Bots. Additionally, he mentored several robotics teams over the years, including FLL and FRC teams. Mr. Haile is an Electrical Engineer with 19 years of experience in analog/digital circuit design and hardware/software/firmware design and development as Principal Applications Engineer at Microchip Technology, Inc. Mr. Haile holds a Bachelor of Science degree in Electrical Engineering from St. Mary's University in San Antonio, TX.



Lisa Griggs is the Treasurer of ATX Robotics. She holds a Bachelor of Science degree from Texas State University and has been homeschooling her 5 children for the past 15 years. Mrs. Griggs has previously worked as a database developer and technical writer in the Houston and Austin areas, but since 2014 she and her husband have been the co-founders of a family-run business.



Peter Anzalone is a Board Member of ATX Robotics and is active in the Austin Startup Community. A 31-year veteran of the telecommunications industry and founder of three engineering companies, he brings a diverse skill set to both ATX Robotics and the Howdy Bots. Mr. Anzalone holds a Bachelor of Science degree in Communications from the University of Texas at Austin, and is the proud father of two grown children.