

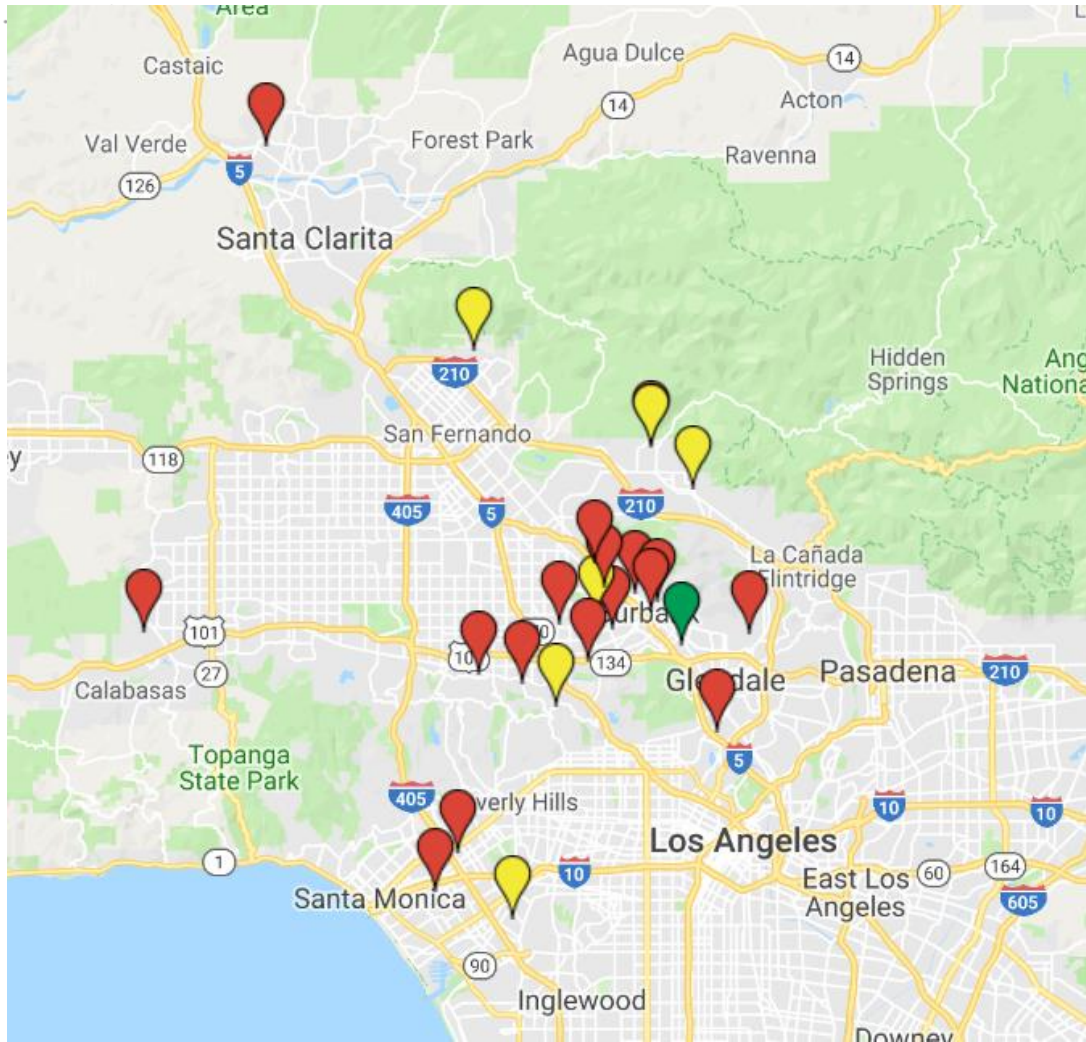
FRC TEAM 980 THUNDERBOTS

A COMMUNITY ROBOTICS TEAM FOR
BURBANK/GLENDALE/NORTH LA COUNTY

2019 CHAIRMAN'S AWARD SUBMISSION

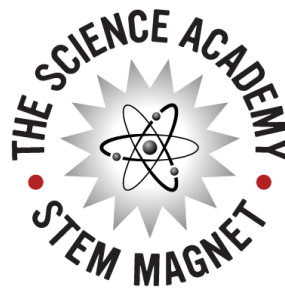


STUDENT/MENTOR MAP



Our footprint –
Burbank/Glendale/North LA county –
covers an area of over 2 million people.

MEMBERS' SCHOOLS



24 students from 14 schools

OUR ALBUM COVER



FIRST Championship 2018 - Houston

RECENT AWARDS



2018 Los Angeles – Chairman's



2018 Los Angeles – Alex Davis, WFFA



2017 Los Angeles - Entrepreneurship



2017 Central Valley - Andrew Farrow,
Dean's List Finalist

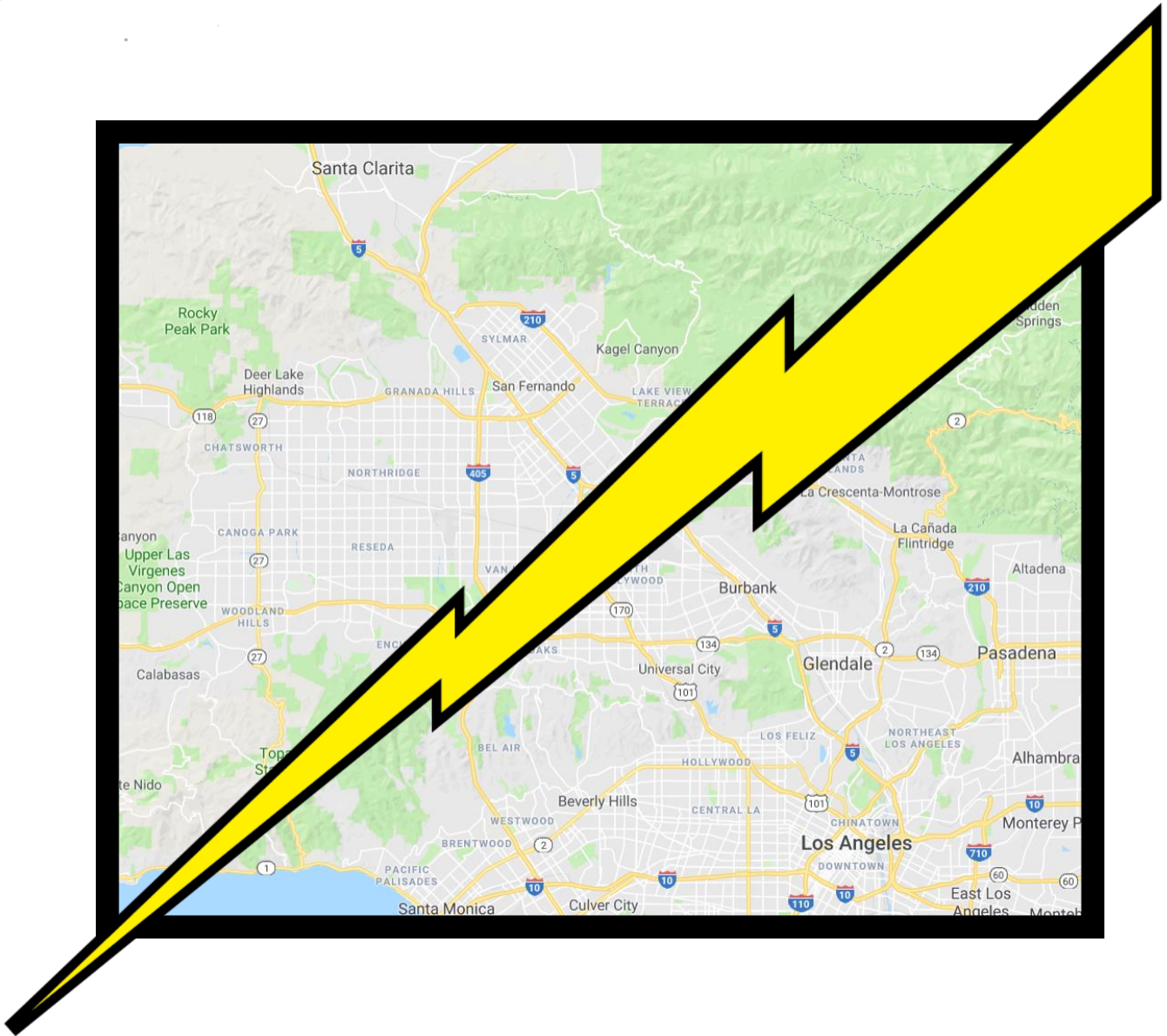


2016 Ventura – Engineering Inspiration

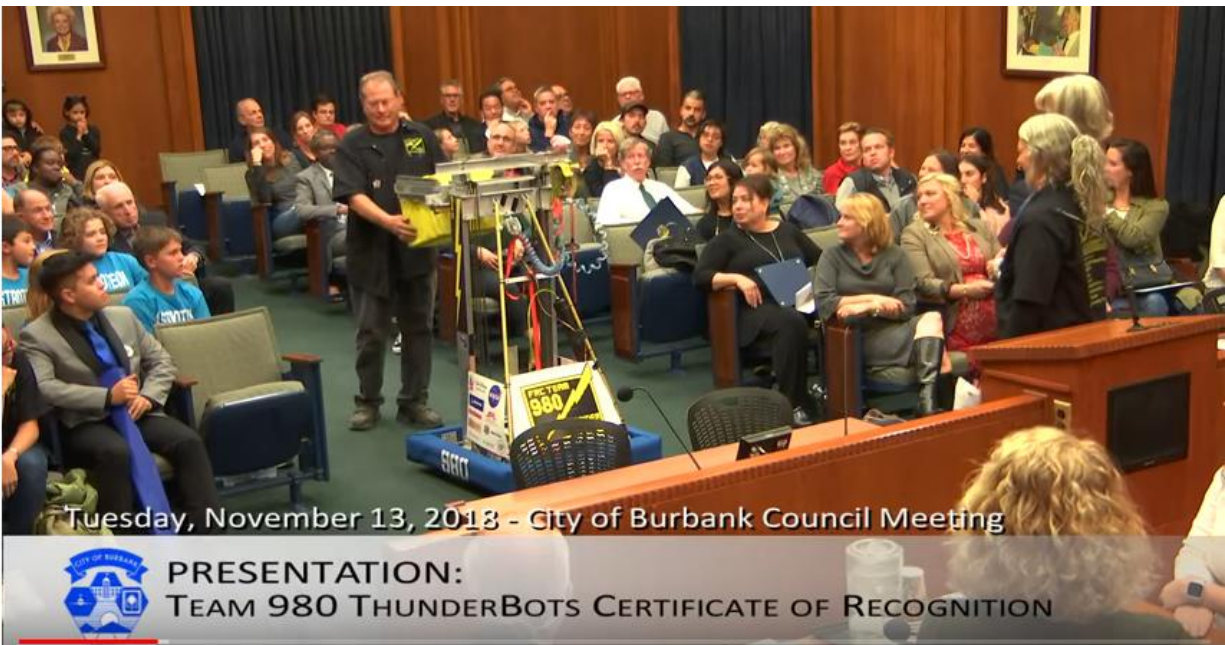


2016 Ventura – David Toyne, WFFA

THUNDER VALLEY



THUNDER VALLEY BURBANK



THUNDER VALLEY BURBANK LIBRARIES



THUNDER VALLEY FIRST LEGO LEAGUE



BALANCED SCORECARD

PERSPECTIVE	OBJECTIVES	INDICATORS	GOALS			
			DEC-18	DEC-19	DEC-20	DEC-21
MISSION	Inspire a growing number of high school students	Number of students participating throughout the year	50	60	70	75
	Educate HS students in STEM	Average number of training hours in STEM per year x number of registered members (220 hours per year per student)	6600 hours received	7700 hours received	8800 hours received	9350 hours received
CUSTOMER	Growing number of members	Number of registered members	30	35	40	40
	Maintain mentor engagement	Number of registered mentors	13	14	15	16
	Be an effective team	Make it into eliminations in at least one regional tournament	yes	yes	yes	yes
		Be awarded at least one individual or team award	yes	yes	yes	yes
	Be active in Inter-team cooperation	Number of teams that we support or partner to execute an activity	20	25	30	30
	Promote FIRST mission	Number of people who received information about FIRST	30,000 people	35,000 people	45,000 people	45,000 people
Be active in community service	Number of community event attended as a team	12	14	16	16	
PROCESSES	Recruiting and induction	Number of students recruited in year	20	25	27	30
		Number of recruiting events	7	8	9	10
		Percentage of student retention	95%	95%	95%	95%
	Marketing process	Number of press mentions of Team 980	6	7	8	9
	Effective design	Simple and effective designs to meet our game objectives	100%	100%	100%	100%
		Number of students using CAD to contribute to the robot design	5	6	7	8
	Organization	% of team utilizing organizational tools	90%	95%	100%	100%
	Solid fabrication	Competition robot complete	2 weeks before bag day	2 weeks before bag day	TBD	TBD
		Build a second robot on time	1 week before bag day	1 weeks before bag day	TBD	TBD
	Effective controls	Student contribution to the source code	100%	100%	100%	100%
		Student contribution to the control design	100%	100%	100%	100%
Controls features meet robot design objectives		100%	100%	100%	100%	
PERSONAL GROWTH	Personal development	Percentage of graduating students who go on to higher education	95%	100%	100%	100%
	Commitment	Attendance	95% of students with 80% of attendance, no student with less than 50%	95% of students with 80% of attendance, no student with less than 50%	95% of students with 80% of attendance, no student with less than 50%	95% of students with 80% of attendance, no student with less than 50%
	Leadership and team work	Number of hours for leadership and team work training	9	10	11	12
FINANCIAL	Increase partnership with sponsors	Updates sent within the year	4	4	4	5
	Get new sponsors	Number of potential new sponsor meetings	12	13	14	14
		Number of new sponsors secured	4	4	5	5
	Increase student fundraising	Amount of money raised by students	\$10,000	\$12,500	\$15,000	\$15,000

Team 980's strategic plan for sustainable growth

THUNDER VALLEY AND THE FIRST MISSION

OBJECTIVES	INDICATORS	GOALS			
		DEC-18	DEC-19	DEC-20	DEC-21

TEAM

Growing number of members	Number of registered members	30	35	40	40
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Our goal for 2020 is to have 40 students: we currently have 25.

FIRST TEAMS

Be active in Inter-team cooperation	Number of teams that we support or partner to execute an activity	20	25	30	30
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For 2020, we are planning a series of community outreach events to include neighboring FIRST teams: FLL, FTC, & FRC.

FIRST

Promote FIRST mission	Number of people who received information about FIRST	30,000 people	35,000 people	45,000 people	45,000 people
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One of our goals is to get FIRST into every public school in Burbank!

COMMUNITY

Be active in community service	Number of community event attended as a team	12	14	16	16
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We want to continue exposing more people in our community to FIRST.

OUR SPONSORS



WALT DISNEY
Imagineering



JPL
Jet Propulsion Laboratory
California Institute of Technology


Raytheon



CUNINGHAM
G R O U P




2019 PROMOTIONAL MATERIALS



FRC TEAM 980 THUNDERBOTS
A COMMUNITY ROBOTICS TEAM FOR
BURBANK/GLENDALE/NORTH LA COUNTY

2019 ENGINEERING NOTEBOOK



Engineering Notebook

MISSION STATEMENT

"To educate and inspire high school students to become the next generation of science and technology leaders by building a competitive robot through the guidance of professional mentors, corporate sponsors, and parents in alignment with FIRST core values."

TEAM HISTORY & GROWTH

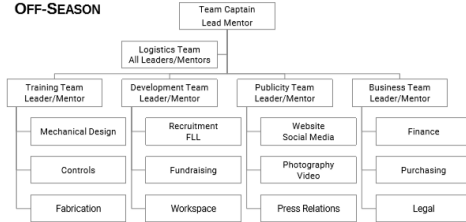
Team 980 is a community team, founded in September 2001 in La Canada-Flintridge, CA, with 10 students and 3 mentors. As of the 2019 build season we have approximately 20 students and 9 core mentors. Team 980 draws our members from the entire region - Burbank, Glendale, and North LA County - an area of over 2 million people. Our students come from over a dozen schools, from Santa Monica to Santa Clarita to Los Feliz. We are grateful to Walt Disney Imagineering for providing us with our current build space in one of their facilities.

As a community team, we are constantly expanding our recruitment efforts by attending Club Rush events at local high schools, holding Robotics Open Houses, and mentoring an FLL team whose members are our future!

ORGANIZATIONAL STRUCTURE

Team 980 has three organizational charts for the three periods of the year: Build Season, Competition Season and Off-Season. The other charts are included as an appendix.

OFF-SEASON



FRC Team 980, 2019 Summary Business Plan Page 1

Summary Business Plan

OUR MISSION

"To educate and inspire high school students to become the next generation of science and technology leaders by building a competitive robot through the guidance of professional mentors, corporate sponsors, and parents in alignment with FIRST core values."

BY THE NUMBERS

We draw students from over **16** schools in multiple cities in North Los Angeles County

We founded the **1ST** FIRST Lego League team in Burbank Unified School District - Thomas Jefferson Elementary's AstroTech

300+ Alumni, of which **90%** go on to higher education, including universities such as MIT, Caltech, and UC Berkeley

We have exposed over **50,000** people to FIRST Robotics through our outreach events, such as FIRST Robotics Day at Dodger Stadium and the ABC7 / Southern California Fire Department Spark of Love Toy Drive

3 of our students have received the Dean's List Finalist Award

TEAM HIGHLIGHTS

- 2001 - Team founded
- 2002 - Won the Rookie All-Star Award
- 2004 - Won the Southern California Regional
- 2005 - Won the Silicon Valley Regional
- 2008 - Won the Los Angeles Regional
- 2016 - Won the Engineering Inspiration Award
- 2017 - Won the Entrepreneurship Award
- 2018 - Won the Regional Chairman's Award
- 2019 - and beyond!

FRC Team 980 ThunderBots info@team980.com team980.com

Sponsor Packet

WISH LIST

ITEMS:	NUMBER NEEDED	SINGLE-ITEM COST	FINAL COST
CNC Mill	1	\$14,000	\$14,000.00
Equipment for Competition Pits	-	-	\$400.00
Graphic Design Software	2	\$50	\$100.00
LEGO Mindstorms EV3 Education Kits for LEGO Robotics Camps	5	\$348	\$1,740.00
New Driver Station Computers	2	\$600	\$1,200.00
Promotional Materials			\$1,210.00
• Brochures	1000	\$0.25	
• Patches	100	\$4	
• Enamel Pins	100	\$4	
• Team Flag	1	\$150	
Travel, Shipping Expenses for 2019 Championships	-	-	\$6,000.00
Upgraded Workstation PCs	2	\$1,000	\$2,000.00
Total:			\$26,650.00

SPONSOR LEVELS AND AWARDS

LEVEL	AWARD
\$25+	Bronze - Team 980 LA Regional Chairman's button
\$50+	Silver - Team 980 lapel pin, 2018 Chairman's button
\$100+	Gold - Team 980 t-shirt, lapel pin, 2018 Chairman's button
\$500+	Platinum - Team 980 mug, t-shirt, lapel pin, 2018 Chairman's button
\$1,000+	Diamond - Name on robot, Team 980 work shirt or polo, mug, t-shirt, lapel pin, 2018 Chairman's button
\$5,000+	Uncolatinum - Name and logo on robot, Team 980 work shirt and polo, mug, t-shirt, lapel pin, 2018 Chairman's button

For more information about the ThunderBots visit: team980.com
For more information about the FIRST Robotics Program visit: firstinspires.org

FRC Team 980 ThunderBots thanks you for your support!

FRC Team 980 ThunderBots info@team980.com team980.com

Sponsor Packet

OUR MENTORS



David Brinza explains our program to an interested parent.



Mark Lingua and David Toyne discuss a part with co-captain Mateo.



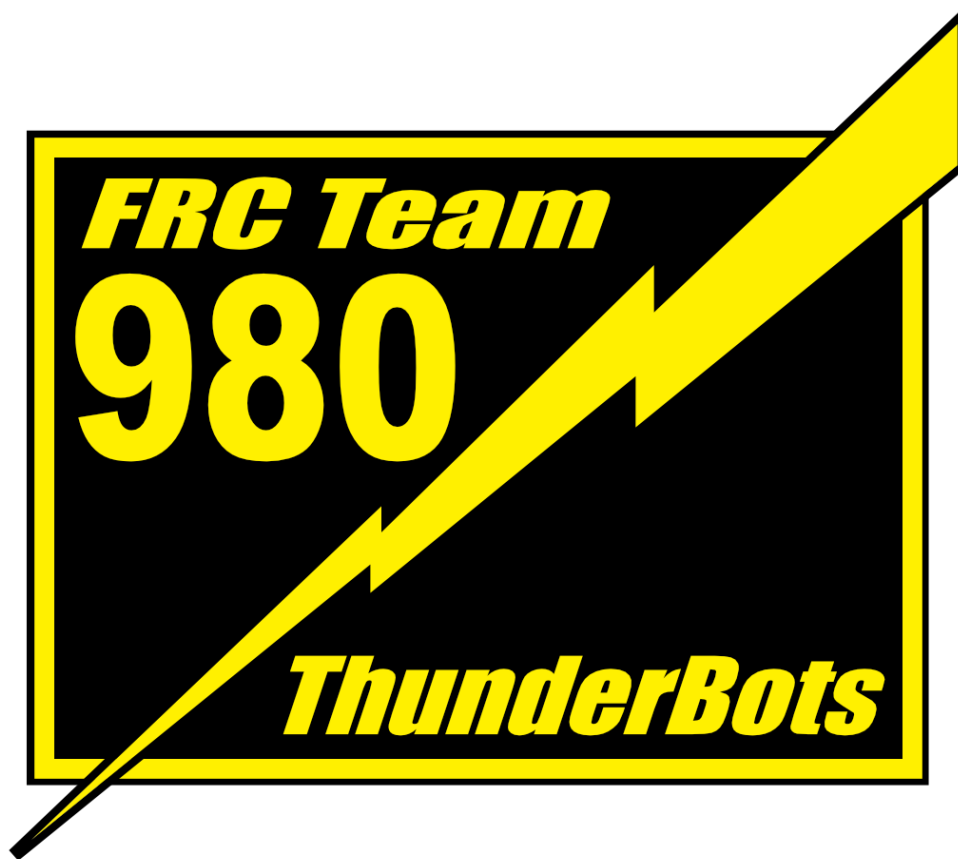
David Graves and Alex Davis investigate the robot's electronics.



Robin Dorfman volunteers as a judge at the 2018 Ventura Regional.

OUR FUTURE

FRC Team 980 introduces **tens of thousands** to STEM, Engineering, and FIRST.



We are creating **strategic partnerships** with groups in our area who are also reaching out to thousands or tens of thousands of youth.

We are also continuing to **spread the word** about **FIRST, Robotics and STEM Education.**

CHAIRMAN'S QUESTIONS

Briefly describe the impact of the *FIRST* program on team participants within the last five years

FIRST prepares students for the challenges of real life. By learning critical thinking and time/project management along with engineering skills, FIRST students are desirable applicants to top colleges. Team 980 2018 graduates are attending MIT, Cornell, Berkeley, UC San Diego, Harvey Mudd, and Drexel, 2 plan to enlist in USAF. Past 5 years 980 grads also attended Purdue and UCLA. One Team 980 student now at CalPoly Pomona attended Apple Camp in 2017.

Describe the impact of the *FIRST* program on your community within the last five years

Created Lego RoboCamp for Gr 5 & 6 at Burbank Libraries. Hosted first FLL QTs at DiscoveryCube LA and Pacoima Charter Elementary. Mentoring the first FLL Team in BUSD. Introduced robots at Burbank City Council, Burbank Public Library, Annual SoCal Fire Dept "Spark of Love" Toy Drive, Club Rush at both Burbank high schools, and Scout Expo at Rose Bowl. Taught Robotics Merit Badge to Troop 36. Held FIRST Robotics Day events at Dodger Stadium and DiscoveryCube LA with other SoCal FIRST teams.

Describe the team's methods for spreading the *FIRST* message in ways that are effective, scalable, sustainable, and creative

Open Houses & LEGO Robo-Camp provide hands-on opportunities to see robotics in action. Parents want STEM education, kids want to build robots. Went to Burbank City Council to tell them about robotics & FIRST. Bringing Open Houses and LEGO Robo-Camp to other libraries. Display at annual WDI FIRST Recruitment event. Launched a build season blog at our website. Past years appeared on Fosters TV show (2016), Google Fashion Show (2017) and A360 Tech Conference (2018) with Dean Kamen.

Describe examples of how your team members act as role models and inspire other *FIRST* team members to emulate

3 Dean's List Finalists and 3 WFFAs in 6 years. 4 team members became Eagle Scouts. Team members mentor first FLL team in BUSD. Team members and a mentor volunteer at FLL tournaments. Hosted FIRST Robotics Day at DiscoveryCube LA with 8 FRC, 2 FTC & 2 FLL teams. Organized FIRST Day at Dodger Stadium: 26 teams, including FRC, FTC & FLL. ThunderScout, our custom scouting software, is free download on Google Play. LEGO RoboCamp documents free at team980.com.

Team's initiatives to help start or form other *FIRST* Robotics Competition teams

In 2017-18, we assisted with the formation of and provided support to FRC Team 2710 JetStream. In the 2016 season, we provided organizational and outreach support to Rookie Team 5810 X-Bots. We are now working with Burbank HS to start new FRC teams for the 2020 or 2021 season, and reaching out to Science Academy STEM Magnet in North Hollywood and Santa Monica HS who both plan to start FRC teams.

CHAIRMAN'S QUESTIONS, PG. 2

Describe the team's initiatives to help start or form other *FIRST* teams (including *FIRST* LEGO League Jr., *FIRST* LEGO League, & *FIRST* Tech Challenge)

Promoted *FIRST* at Burbank Library Open House-got a mom to start FLL team AstroTech that we mentor. Next year she's starting at least 1 other team that we'll mentor. Went to Burbank City Council to share our desire to bring FLL to every elementary and middle school in Burbank. Resurrected the dormant Delphi Academy FLL Delphi Dragons. Planning to bring Open Houses to Sunland/Tujunga and other underserved communities; looking for sponsor for Mindstorm EV3s to bring LEGO Robo-Camp to those areas.

Describe the team's initiatives on assisting other *FIRST* teams (including *FIRST* LEGO League Jr., *FIRST* LEGO League, & *FIRST* Tech Challenge) with progressing through the *FIRST* program

We assisted FRC 580, 2404, 2710, 4019, 1661 with design, controls, fab and awards advice and assistance. We invite local teams to join us at outreach events. FRC 599, 3328, FTC 25 and FLL Delphi Dragons joined us at Burbank Library Open House. FRC 3328, 589 and FTC 3526 help us create and teach LEGO Robo-Camp. We volunteer at several FLL QTs, and SoCal FLL Regionals. We volunteer at LA Robotics' Fall Classic. We invite local FRC teams to our workshops. We supported FRC 207 at their MakerFaire.

Describe how your team works with other *FIRST* teams to serve as mentors to younger or less experienced *FIRST* teams (including *FIRST* LEGO League Jr., *FIRST* LEGO League, & *FIRST* Tech Challenge)

Team 980 mentored rookie team FLL AstroTech. AstroTech is starting at least 1 new team, we will mentor them. Assisted FRC 2710, now in their 2nd year, with mentoring, guidance on awards submissions; helped them find an engineering mentor. 980 member who's a student at FRC 4019's home, Bridges Academy, helping them with what he's learned at 980. We assist less experienced teams at FRC events, including doing robot repairs if needed.

Describe your Corporate/University Sponsors

Our major corporate sponsors are Walt Disney Imagineering, NASA/JPL, Boeing and Raytheon. Walt Disney Imagineering gives us mentors, major financial support, and a build space. Boeing and Raytheon give us mentor and financial support. NASA/JPL has supplied mentors and funding since our creation in 2002. We also thank Cooler Master for their generous donations of computer peripherals.

Describe the strength of your partnership with your sponsors within the last five years

Strong relationship with WDI and NASA/JPL. Grateful to WDI for build site, and exhibit Team 980 and *FIRST* to Imagineers at annual *FIRST* recruitment and other events. Proud NASA house team, enjoying special opportunities like weekly telecom and NASA teams tour of Johnson Space Center after Champs 2018. Our mentors from JPL, Raytheon and Boeing bring expertise and insights into the aerospace industry. Our entrepreneurial mentors share their time and their intellectual and material support.

CHAIRMAN'S QUESTIONS, PG. 3

For *FIRST* Robotics Competition teams older than 5 years, briefly describe your team's broader impact from its inception

Rookie All-Star 2002, fastest to Engineering Quincta, Team 980 started as a solid engineering team, evolved into a well-rounded FRC team, culminating in a Regional Chairman's award in 2018. We honed our message, brought consistency to our promotional materials and developed a clear focus for our outreach. From our build site on the Burbank-Glendale border, we influence and inspire across our footprint in the San Fernando Valley. We call this branding and marketing initiative "Thunder Valley."

Describe how your team would explain what *FIRST* is to someone who has never heard of it

FIRST is a robotics program that cultivates generations of creative problem-solvers. FIRST Sponsors, Mentors and Coaches inspire students to challenge their own imaginations and innovate the future. FIRST students are uniquely prepared for STEM educations and careers. Although it's a robotics program, FIRST isn't just building robots. FIRST is about the future.

Briefly describe other matters of interest to the *FIRST* Judges, if any

Team 980 has 20+ students from over a dozen schools across northern LA county, from a wide variety of cultures and socio-economic backgrounds. We've produced three Dean's List Finalists and 3 Woodie Flowers Award Finalists. Lead mentor is acting President of LA Robotics and LRI at Regionals and Champs. Outreach Mentor is judge for FLL and Judge Advisor for new LA North Regional. Other mentors are a FIRST Senior Mentor and Robot Inspector, and FIRST Community Engagement Leader.

CHAIRMAN'S ESSAY

Rookie All-Star in 2002, fastest to Engineering Quincta, Team 980 started as a solid engineering team, evolved into a well-rounded FRC team, culminating in a Regional Chairman's award in 2018. In parallel, we honed our message, bringing consistency to our promotional materials and developing a clear focus for our outreach events. From our build site on the Burbank-Glendale border, we are able to influence and inspire across our wide footprint in the San Fernando Valley. We named this branding initiative "Thunder Valley."

We won our first Engineering Inspiration Award in 2016, our first Entrepreneurship in 2017, and in 2018 we were LA Regional Finalists and won our third WFFA and our first Regional Chairman's Award. These recognitions fueled our passion, and inspired us to find new and exciting ways to share the message of FIRST. We organized outreach events all around the City of Burbank, at DiscoveryCube Los Angeles, Boy Scout Expo at the Rose Bowl, and at Dodger Stadium, where we featured 26 FIRST teams from across SoCal for the first FIRST Robotics Day.

Team 980 is a community team. We have to get creative with recruitment and make sure interested students know that we exist. One way we do this is by taking our robot to Club Rush events at local high schools. Team members also spread the word to their friends. In the 2019 season we have two dozen active students from over 14 different schools.

In the spring of 2017, the Burbank Library asked us to do a robotics program for kids. Thanks to funding from the Friends of the BPL, we created and ran a LEGO® Robo-Camp using LEGO® Mindstorms EV3s. Designed and taught by Team 980 and students from FTC 3526 Marlbots, FRC 589 Falkon Robotics, and FRC 3328 NoHo Robo, the camp introduced 5th and 6th Graders to STEAM, FIRST, and LEGO® robotics. From learning how to code and build a robot to talking to judges, our campers enjoyed the experience and went home wanting more robots. The camp is now offered annually, and we are developing an advanced robot basics class for older students. All our documentation - curriculum, schedule, and mat layout - is available for free at our website.

Much of our outreach is focused on Burbank. We hold Open Houses at the Public Library, and we help their robot and space-themed lectures-always with a robot demonstration on the side. We have marched in the annual Burbank on Parade-with robot, of course-and participate in the annual KABC-7 and SoCal Fire Department Spark of Love Toy Drive, with a robot as a FIRST ambassador. All of these events introduce Burbank families to STEM and FIRST Robotics and we tell them how to ask for FLL, FTC or FRC teams at their schools.

When a mom was inspired by our 2018 Burbank Library Open House to start an FLL team, we said "We'll gladly mentor it!" So Team AstroTech, BUSD's first FLL team, was born, with Team 980 students as mentors. When we received a recognition from the Burbank City Council for our first Chairman's Award, we brought our FLL team with us. Getting FIRST teams into all the schools in Burbank is going to require working with the City Council and the Board of Ed, and this was an important first step to getting that done.

CHAIRMAN'S ESSAY, PG. 2

In addition to mentoring FLL AstroTech, Team 980 works with LA FLL at FLL QTs and the SoCal Regional Championships. In past years we hosted new FLL QTs at DiscoveryCube LA and Pacoima Charter Elementary School, in underserved areas in great need of STEM. LA FLL didn't fill those QTs this year, so we volunteered at two other QTs in the LA area.

FLL AstroTech is spinning off at least one new FLL team next year, and we'll mentor them, too. To grow FLL across our area, we're soliciting for a sponsor to help us buy our own Mindstorms EV3s so we can offer our LEGO Robo-Camp in other libraries, especially in underserved areas like Sunland/Tujunga. Our goal is to help start enough FLL teams in our area that we can host and fill a new FLL QT in Burbank.

We thought that 2019 would be a hard year for our team. We were coming off a successful season, but graduated 11 seniors, including student leaders in all our subteams. Well, we were wrong. Our new seniors assumed their roles as team leaders, setting an energetic pace over the summer with days that began with teaching LEGO Robo-Camp in the morning, and gathering in in the afternoon to renovate and reorganize our build space to hold a practice half field. Aided by the mentors, our student leaders helped train new members with a series of educational workshops in the fall: Fab 101, SolidWorks Intro and Advanced, Java, Electronics, and Robot Design. Even before the announcement of the Summary Business Plan, we had created a four page sponsor package, launched a new, clean website, and redesigned all our logos and printed materials to have a consistent look and feel.

Our student leaders have continued Team 980's mission of modeling a real engineering firm and maintaining a strong organizational foundation to ensure success. Utilizing business applications like Slack for team communication, and cloud storage programs like Google Drive, GitHub, and GrabCad, we ensure everyone is kept in the loop and has access to all works in progress. Team 980 teaches our students how to thrive in a professional engineering environment. Since we've had so many Eagle Scouts, we decided to run our subteams-Design, Fabrication, Controls, Business-like Scout patrols. Team leaders work with Co-Captains and Mentors to set targets and coordinate with the entire team at our weekly meetings and periodic requirements reviews. Our three Organization Charts show how we adapt this throughout the year for the Build, Competition, and Off-Seasons.

All four of our sub-teams are led by Team 980 veterans. Luke, our most veteran member, is Controls Lead and Team Co-Captain. Controls is upping their autonomous game while meeting the challenge of programming a new articulated arm. Led by Sean, Mechanical Design is seeing a growth spurt as new students discover the importance of learning SolidWorks and other CAD programs. Team Co-Captain Mateo is the Fabrications Lead as well as Drive Team Captain, and holds the team record for changing out a transmission in the pits at Champs between matches. Ethan has the challenge of leading the Business Team after their successes over the last few years.

CHAIRMAN'S ESSAY, PG. 3

Our mentors set the tone for our team, bringing their passion and experience, but refusing to leave the sarcasm at the door! Lead by the first of our three WFFA winners, Lead Mentor David Brinza, Principal Systems Engineer at NASA/JPL, has been with Team 980 since 2003. David Toyne, WFFA, designs one-of-a-kind alternative power farm machinery. Mark Lingua is a racing legend with a degree in medical and electronics manufacturing, a long history in the Aeronautics industry, and multiple land speed records. Robin Dorfman, who graduated from Harvard with a degree in Medieval History, leads the Outreach and Business teams. Alex Davis, Controls Mentor, teacher and our newest WFFA, is an LMU grad in EE. David Graves from Raytheon is a FIRST alum from FRC 702 and Cal State LA grad in EE. Ian Tan from Boeing mentors Mechanical Engineering. Other mentors include FIRST Community Engagement Leader Eileen Kahn and FIRST Senior Mentor Mark Lampert.

Team 980 is rightfully proud of our students and alums. We go to some of the top schools-MIT, Cornell, UC Berkeley, UC San Diego, Harvey Mudd, CalPoly Pomona, Drexel, UCLA, Purdue, CalTech, Williams, CalPoly SLO and U Michigan-and have successful careers-at Northrup Grumman, Honda Racing Development, and as entrepreneurs in metal fabrication and speciality design. This doesn't happen just because we're part of any team, it's a result of everything we've learned as part of Team 980. Team 980 emphasizes skills like concise communication, the ability to solve complex problems, and the mastery of fabrication techniques, CAD modeling, electrical design, and software development. We strive to build the character of every team member, valuing leadership development and cooperation between peers, ensuring that every student graduates ready to be responsible individuals, able to go out into the world with the confidence to face whatever challenges lie ahead.

All FRC teams rely on their special relationships with their sponsors. From NASA/JPL we get not only our lead mentor but unique opportunities like the 2018 post-Champs tour of NASA JSC. Boeing and Raytheon contribute mentor and financial support, Cooler Master donated computer peripherals, and SolidWorks gives us special licenses for their software. As a community team, finding an appropriate build space is a major challenge. Team 980 has built in 10 different locations, including garages and an unheated Rose Bowl float warehouse. In 2013, Walt Disney Imagineering graciously provided us with build space and we've been with them ever since.

With everything we have done this year, we continue to ask ourselves what comes next. There are so many students in our community who do not have access to STEM and the opportunities that FIRST offers. From the city closest to our build site, to the edges of LA County, Team 980 has found an overwhelming need and demand for programs, teams, and mentor support. We're meeting with Assemblywoman Luz Rivas, an EE graduate from MIT, to tell her all about FIRST. We'll continue to talk to the Dodgers about creating STEAM events at the stadium; someday our robot will throw out that first pitch! And we'll work with schools in our area, including Burbank HS The Science Academy STEAM Magnet in North Hollywood, and Santa Monica HS, to start their own FIRST Robotics programs.

CHAIRMAN'S ESSAY, PG. 4

From our LEGO® Robo-Camp, Robot demos, and FIRST Robotics Days, to our recruitment drives at Burbank and Burroughs high schools and appearances throughout our region, we are creating Thunder Valley, bringing FIRST to all of Burbank/Glendale/North LA. That's what it means to be Team 980.