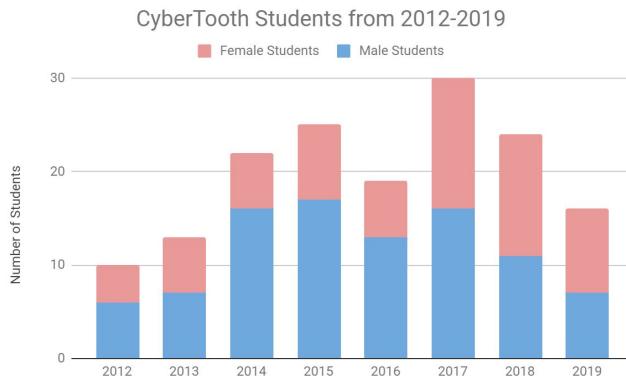


CyberTooth
robotics team

2019 Summary Business Plan

Mission Statement: CyberTooth strives to create and grow a sustainable team to compete at the highest level in *FIRST* while positively impacting the culture and promoting STEM in Northwestern High School and throughout Howard County.

Team History & Growth: CyberTooth was founded in the fall of 2011, and since that time the team has had a significant impact on a number of students and mentors alike. Over the last two years, the total number of students has slightly decreased, but all team members are able to contribute in measurable ways. We feel that this year all students are actively engaged and participate in team activities which is a goal for the team. Additionally, the team is proud to have achieved an approximate 1:1 male/female student ratio on the team over the past 2 years.



There are several ways in which the CyberTooth team manages team turnover and promote team growth.

1. Ensure skills are passed down from older students to younger students.

The team ensures this by fostering a safe learning environment where students feel they can participate in all aspects of the team. In the fall, CyberTooth has training sessions for students to learn new skills in preparation for the build season. Upperclassmen actively encourage younger students to work with them during the build season.

2. Have a strong mentor base to provide consistent leadership beyond the 4-year student cycle.

On CyberTooth the lead engineer and teacher have remained constant since the team's rookie year. Additionally, new mentors have been recruited from sponsor companies and parents are encouraged to assist and mentor. This year a former team alumna is actively mentoring the CyberTooth team. Additionally, parent mentors have remained on the team even after their children have graduated.

3. Actively recruit new students every year.

CyberTooth holds callout meetings, attend freshman orientation, and promotes robotics to incoming students to recruit new members. CyberTooth hosts fun demos and activities in our shop which are advertised at the high school. Additionally, the team invites new members to off-season competitions such as RAGE and CAGE held in the fall.

4. Grow and maintain a broad sponsor base.

CyberTooth has two primary sponsors, AndyMark, Inc. and The FCA Foundation. AndyMark, Inc. provides the team with robot parts, technical and non-technical mentors, and a build space. The FCA Foundation provides financial support for team registration. In addition, students and mentors actively seek additional sponsorship from other local business in the Howard County area such as Haynes International, True Precision Technologies, and more. CyberTooth also works with local manufacturing companies for in kind donations.

Organizational Structure: (See Appendix A)

- **Mentor Structure:** CyberTooth's primary organizational structure involves a mentor steering committee. This committee is responsible for broad scale team decision making and crisis response. The committee is made up of mentors with a long term commitment to the team including, parents, sponsors, and teacher mentors.

There is a designated Lead Engineer responsible for managing build space and robot fabrication logistics. A Lead Teacher is responsible for school logistics, event transportation, and managing finances through Northwestern High School.

Mentors provide direct support to students in all different departments. In addition, parents are in supporting roles providing meals and other logistics to the team.

- **Student Structure:** CyberTooth organizes both students and mentors into different departments. For the 2018-2019 season, CyberTooth appointed one overall team captain and seven director level leaders. For each student leader, a supporting mentor is paired with that student to provide direct mentorship and feedback.

The team captain is responsible for being the "face of the team" providing leadership for the student directors. Each student director is in charge of leading a group of students and mentors to accomplish department tasks during the pre-season and build season.

- **Leadership Process:** Student leaders apply, interview and are chosen by mentors for leadership roles. This process mirrors a job interview process. To accommodate team dynamics, this organizational chart is re-evaluated every year and changes based on the student group and their skill level. For example, in 2019 there were multiple students with mechanical skills and leadership so the "Director of Mechanical" position that was held by one student was split to three director level positions: "Director of Mechanical Design, Director of Mechanical Fabrication, and Director of Pneumatics".

SWOT Analysis:

Strengths	Weaknesses
<ul style="list-style-type: none">• CyberTooth has many committed mentors to supervise meetings• AndyMark partnership provides robot parts, mentors, and build space• FCA partnership provides mentors, and financial support• Strong admin support from Northwestern HS• 1:1 Male/Female Student Ratio• Strong brand and recognizable image	<ul style="list-style-type: none">• Students on CyberTooth are active in other school activities such as band, science fair, and sports teams.• CyberTooth does not build at the school and requires students to attend meetings at AndyMark.• Lack of parental team support and interaction for peripheral support such as meals, booster club commitments and transportation.
Opportunities	Threats
<ul style="list-style-type: none">• Northwestern Middle and Elementary Schools have robotics teams that CyberTooth can recruit from.• State Championship has been in Kokomo allowing for more media opportunities and sponsor engagement.• Team has connections to local library, schools, and community centers.• Potential to engage social media connections	<ul style="list-style-type: none">• Recruitment from 2021,2022 graduating class has been low.• School administration changes could impact support of program.• Student graduation could lead to parent mentors "retiring".• Major manufacturing sponsors could reduce funding.• Qualifying for and attending the World Championships for multiple years in a row is expensive

SWOT Action Plan:

- Research effective ways to use social media to engage with current sponsors, get additional sponsorships and team recognition.
- Directly mentor Middle and Elementary School Robotics teams, expand FLL program, to ensure students know CyberTooth and join the team in High School
- Continue to recognize current sponsors and school administration to show appreciation for support and ensure support continues for years to come.
- Invite sponsors and contacts to the local Indiana State Championship event.
- Continue to recruit new student members in school activities and keep them engaged throughout the off-season
- Put additional effort into recruiting parents of new students to fulfill meal and other duties.

Marketing: CyberTooth makes a priority out of making sure that our team is known. We accomplish this goal through our vibrant purple imagery. The team ensures the robot gets powdercoated in its distinctive purple color. Team members wear purple tie-dye during competition and demos. The team, and its affiliate Northwestern High School share the purple color and the "CyberTooth" mascot is a nod to the "Sabertooth Tiger" was drawn from the Northwestern Tiger Mascot. This ensures our recognizability within the Kokomo community. The team maintains connections through social media platforms, such as Instagram and Twitter, updating our website regularly with build season blog posts and event summaries, and writing press releases to local newspapers such as the Kokomo Tribune.

Financials: (See Appendix B & C) CyberTooth operates under the Northwestern High School 501c3 organization. Incoming funds go directly to the school. CyberTooth actively seeks to maintain previous sponsors and add new sponsors each year by sending letters, emails, and making personal visits to present. CyberTooth is privileged to have key sponsor relationships with the following organizations which make the team highly sustainable.

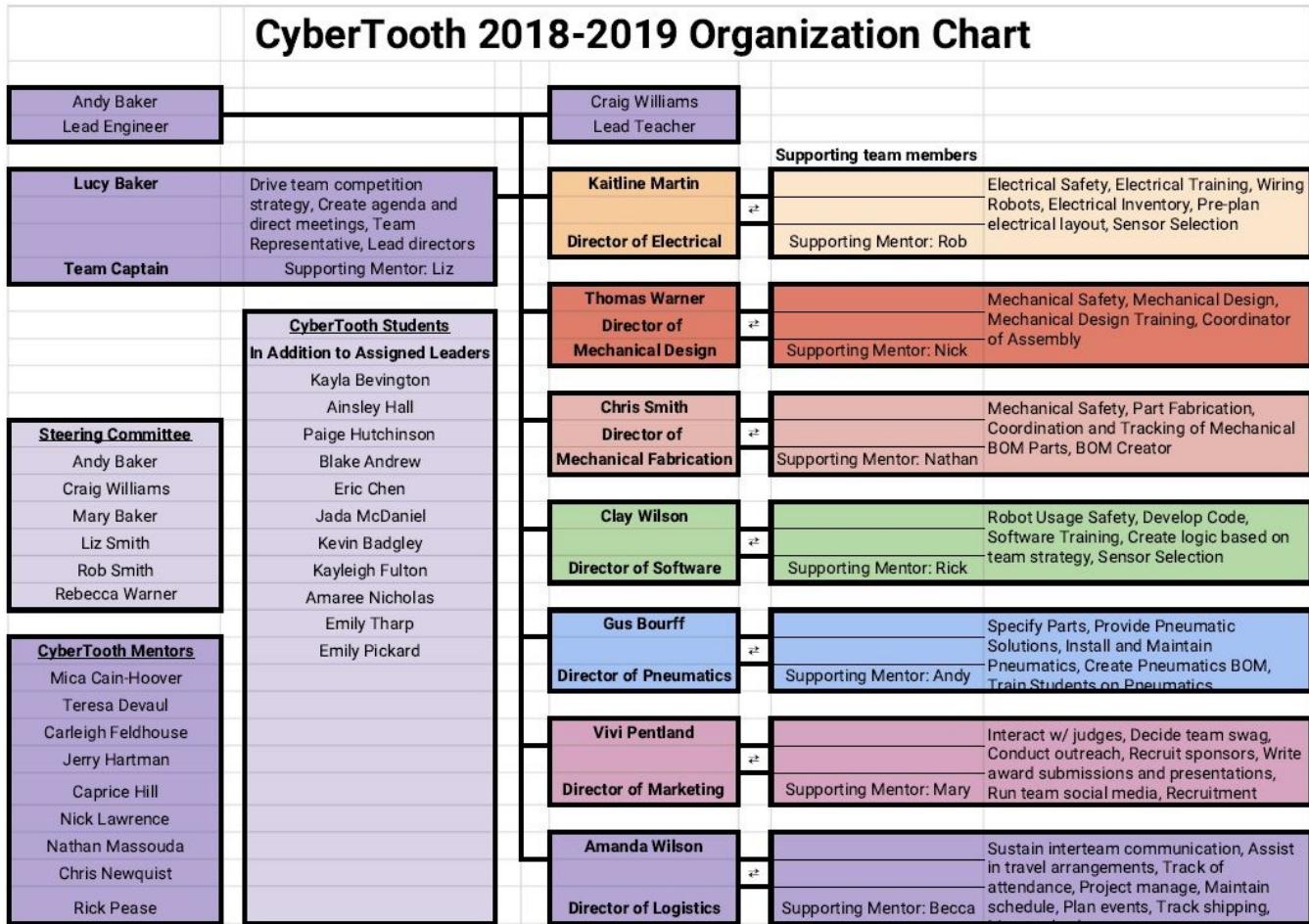
AndyMark, Inc: Provides a build space, mentors, and in kind donations for all of the parts to build the robot up to \$10,000 each year. In partnership, many CyberTooth students have been selected for internships over the summer and have been offered jobs. The CyberTooth team trains the students with the skills needed to perform well in their job functions.

FCA Foundation: Provides financial support for team registration. Additionally, provides local technical mentors to support the team, and other resources to ensure the team successfully can compete and transport equipment to and from events.

In Kind Sponsors: CyberTooth relies on a number of In-kind sponsors such as TGR Finishing who provides a powder coating service for the robot each year, or Fastenal who provides the team with tools and equipment. The Kokomo community has a number of machine shops and service providers that can assist the team with the manufacturing and production of parts.

Community Sponsors & Grants: To fundraise the additional money for other items, the CyberTooth team relies on a number of additional community sponsors, Grants and individual donors who are recognized for any contribution they can make. These sponsors help reduce the number of dues required by each student and pay for additional items such as team meals, imagery costumes, and equipment. The team likes to keep a wide base and both students and mentors look for new opportunities each year to ensure the team has enough funds.

Appendix A: 2018-2019 Team Organizational Chart



Appendix B: CyberTooth Budget Sheet

Description	Paid by	Expected Donations	Value	Received	Maximum Expenses	Minimum Expenses	Actual Expenses	Notes
CyberTooth Team Balance at NSC		\$1,000	\$1,000					
Planned Carry-Over for 2020					\$5,000.00	\$5,000.00		
District Registration								
District Event #1 Registration-	NSC CyberTooth				\$5,000.00	\$5,000.00	\$5,000.00	
District Event #2 Registration-					\$0.00	\$0.00		
Regional Registration	NSC CyberTooth				\$5,000.00	\$5,000.00		
Indiana State Championships	NSC CyberTooth				\$4,000.00	\$4,000.00	\$4,000.00	
District Expenses								
Hotel for #1 District-					\$1,800.00	\$1,000.00	\$1,500.00	
Hotel for #2 District-					\$1,800.00	\$1,000.00	\$500.00	
Hotel for State Championship					\$0.00	\$0.00	\$0.00	
Food for State Championship					\$150.00	\$0.00		
Regional								
Hotels for Regional					\$3,100.00	\$2,400.00		
Travel for Regional					\$10,000.00	\$1,000.00		
Marketing Items	AndyMark						\$	1,700
Team Uniform	NSC CyberTooth				\$1,700.00	\$500.00	\$800.00	One T-shirt for students (32), One Polo for Mentor (20)
Extra CT Shirts					\$200.00	\$100.00		
Buttons					\$200.00	\$100.00	\$600.00	24 Hour Wristbands dot com - 1500 Buttons (\$260) 500 Dog Tags (\$370) Wristbands (195)
Wristbands/Dog Tags					\$300.00	\$100.00	\$300.00	2017 price: 795.87
Lanyards					\$200.00	\$100.00		
Toothbrushes					\$400.00	\$100.00	\$0.00	Quality Logo Products dot com- have some leftover from 2018
Paper Handouts					\$200.00	\$100.00		
Team Tutus or Alternative					\$200.00	\$0.00		Purchased on Amazon
Build Season Items								
Off-Season Registration					\$1,000.00	\$1,000.00		
RAGE 2018 Registration							\$0.00	
CAGE 2018 Registration								
Boiler Bot Battle 2018 Registration							\$100.00	
World Championship Expenses								
FRC Championships	NSC CyberTooth				\$5,000.00	\$0.00		
Hotel for World Championship					\$7,000.00	\$0.00		
Trailer Transport					\$500.00	\$0.00		
Other								
End of Year Gifts					300	0		
Confirmed								
Asked for								
Hoped								
Not Sponsoring this year								
5 Gear Sponsors (\$5,000)								
AndyMark, Inc.	AndyMark	IN KIND	\$10,000	IN KIND				
Fiat Chrysler Foundation Grant		\$5,000	\$4,725	\$4,725				IN KIND: Robot parts (\$4,500), Space (\$3,000), Employee time and travel, (\$4,000), Other (\$ run through Michigan FIRST
4 Gear Sponsors (\$1,000-4,999)								
Haynes International Sponsorship	Haynes	\$1,500	\$1,500	\$1,500				annual gift since our founding
Dassault Systems / SolidWorks	SolidWorks	IN KIND	\$1,000	IN KIND				Filled out form for 2017 for SolidWorks Software Donation
Indiana Transmission Plant 2								IN KIND: coverage of time and travel
NW Booster		\$800	\$800	\$1,665				based on hours worked only
Merrell Brothers Sponsorship	Merrell Brother	\$500	\$500	\$500				
TGR Finishing		IN KIND	\$1,000	IN KIND				IN KIND: Purple & White powder coating of 1 batch of parts, usually 1-2 weeks before bag
IN/MAC		\$2,000	\$2,000	\$2,000				
DOE CTE Perkins Grant		\$0						Not available in 2016 - maybe future?
UAW Sponsorship	UAW?							
SWE Grant	SWE	\$1,000	\$0					Grant not received in 2018
Echelbarger Precision Machining Sponsorship	HC-E	IN KIND						IN KIND: parts fabrication AND monetary donation
3 Gear Sponsors (\$500-999)								
Fastenal		IN KIND	\$540					IN KIND: Tools and Hardware Donation
H&R Industrial		IN KIND	\$500	\$500				Welding services 2018. Made a monetary donation 2016
True Precision Technologies		250-500	\$500	\$500				
Dr. Ray Christine		\$500	\$500					2015
2 Gear Sponsors (\$499-200)								
Andersons, Inc.	Anderson	\$200	\$200					
Kokomo Grain	Kokomo Grain	\$200	\$200					
CJMR Inc.	CJMR Inc.	\$200	\$200					
Judge Bill Menges		\$200	\$200	\$200				
Community First Bank		\$250	\$250	\$250				
SoftTiles		IN KIND						Received Floor Tiles for pit, need to distribute postcards and take pics
Dan's Variety Bakery		IN KIND						IN KIND: Donuts brought in by the Chous
Expressions Inc.								Discount on Apparel orders
Ross Jordan	Cash							\$300 in cash for meals at Dayton event 2018
Accredited Driving School								
MidPro Fluid Power	In-kind	IN KIND	\$200					In-kind donation of qty 8 Bimba Original 041.5 HP
1 Gear Sponsors (\$199-10)								
Wyman Group		\$100	\$100	\$100				
Gorman and Bunch		\$100	\$100	\$100				
Erik's Chevrolet		\$100	\$100	\$100				
Maple Grove Distributing		\$100	\$100	\$100				
Applied Industrial, Greg Jones								2015
First Farmers Bank and Trust	Allison Wolf	\$150	\$150					2015
Kathy & John Peters	Kathy Peters							
Indy Tire	Indy Tire	\$50	\$50					2015
Student Team Dues		\$3,600	\$3,600	\$3,600				Combination of fundraising and student monetary input
Fundraising: AM work sessions	AndyMark							Available to help pay for Team Dues
EWatt Bulb Sales								Available to help pay for Team Dues
Win-win card sales	Students							Available to help pay for Team Dues
Heritage Lanes Fundraiser								
Fundraising: other	Students	\$4,000	\$4,000					
		\$21,550	\$33,015	\$16,840	\$53,050.00	\$26,500.00	\$12,800.00	

Appendix C: 2018-2019 Sponsorship Levels

CyberTooth Sponsorship Levels and Recognition

	5 Gears	4 Gears	3 Gears	2 Gears	1 Gear
					
Sponsorship Support (value of contribution)	\$5,000+	\$1,000-\$4,999	\$500-\$999	\$200-\$499	\$100-199
Headlining sponsor for CyberTooth					
Organization name associated with year-end scholarships					
Large-sized logo featured on competition robot, pit signs, team shirt, and handbook					
Medium-sized logo placed on competition robot, pit signs, team shirt, and handbook					
Access to attend FIRST Kickoff in Manchester, NH representing CyberTooth					
Special recognition at Competition Events and in press releases					
Special appreciation presentation at organization by team					
Sponsor recognition award hardware					
Organization name placed on CyberTooth t-shirt, and handbook					
Sponsor recognition framed certificate					
Recipient of CyberTooth News Updates					
Recipient of thank you letter					

Sponsor Information

Organization _____

Primary Contact _____

Street Address _____

City _____ State _____ Zip code _____

Phone _____ email address _____

Amount of Sponsorship _____

Please make sponsorship check out to "Northwestern High School - CyberTooth"

Mail completed form and check to: **Northwestern High School**

attn: Craig Williams
3431 N. Co Rd 400 W
Kokomo, IN 46901

Email contacts:

Craig.Williams@nwsc.k12.in.us
andyb@andymark.com

100% of sponsor donations supports CyberTooth competition entry fees, material costs, and/or travel expenses for team members. Northwestern School Corporation is an Indiana public school system, with an associated tax id as 35-6002543. US FIRST is a 501c3 public charity, with Federal Tax FEIN #22-29909098. Donations are deductible to the extent provided by current IRS tax laws.