

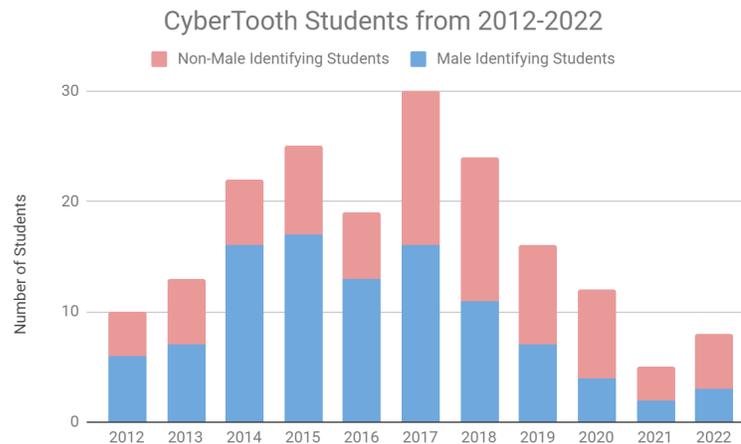


***CyberTooth***  
*robotics team*

*2022 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. Since peak in 2017, team membership has declined. The all-low was during the pandemic season of 2021 where the team competed in at-home challenges. Efforts to expand the team this year have been successful and the team hopes to continue to trend upward in enrollment.



There are several ways in which the CyberTooth team manages team turnover and promotes 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, attends 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 businesses in the Howard County area such as Haynes International, B&D MFG, True Precision Technologies, and more. CyberTooth also works with local manufacturing companies for in kind donations.

## Organizational Structure:

- **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 2021-2022 seasons the small team lead to “captain” being the only leadership position. There are plans to re-expand in the future.

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”. For 2020, those positions were recombined into one role.

## SWOT Analysis:

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>● CyberTooth has many committed mentors to supervise meetings</li> <li>● AndyMark partnership provides robot parts, mentors, and build space</li> <li>● FCA &amp; SWE partnerships provide mentors, and financial support</li> <li>● Strong admin support from Northwestern HS</li> <li>● 2:1 Female/Male Student Ratio</li> <li>● Strong brand and recognizable image</li> <li>● Consistently ranking high at the district level and winning an event the past season</li> <li>● Full field access at our workspace</li> <li>● Consistent and supportive sponsors and additions of new sponsors</li> </ul>	<ul style="list-style-type: none"> <li>● Students on CyberTooth are active in other school activities such as band, science fair, and sports teams.</li> <li>● CyberTooth does not build at the school and requires students to attend meetings at AndyMark</li> <li>● Lack of parental team support and interaction for peripheral support such as meals, booster club commitments and transportation.</li> <li>● Difficulties with recruitment</li> <li>● Effective communication with school and student body</li> <li>● Student attendance, especially affecting off-season productiveness</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>● A Northwestern School Corporation School has a robotics team that CyberTooth can recruit from</li> <li>● CyberTooth is actively forming a middle school FLL team</li> <li>● Team has connections to local library, schools, and community centers</li> <li>● Potential to engage social media connections</li> <li>● Working with other FRC teams in our community</li> <li>● Opening up our field and workspace</li> <li>● Close relations and partnerships with teams outside of our community</li> </ul>	<ul style="list-style-type: none"> <li>● Student-body interest in robotics is low, not a lot of interest</li> <li>● Student graduation could lead to parent mentors “retiring”</li> <li>● Qualifying for and attending the World Championships for multiple years in a row is expensive</li> <li>● Expensive robot and team budgets</li> <li>● Difficulties establishing feeder programs at the elementary and middle school levels</li> </ul>

## 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 Northwestern HS event.
- Continue to recruit new student members in school activities and keep them engaged throughout the off-season.
- Find new ways to recruit and reach students by interacting more within the school and classes.
- Put additional effort into recruiting parents of new students to fulfill meals and other duties.
- Work and communicate with teams more frequently outside of competition and build season.
- Reach out more to alumni to ensure they remain involved in FIRST and with the team.
- Make monetary goals to remind ourselves to be conscientious of spending.

**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.

**Apple/Society of Women Engineers:** Was brought on as a new grant/sponsor for 2022. The team utilized existing mentors affiliated with SWE, and strong female team demographics to be eligible for this grant of \$16,000. This donation was a huge positive gain for our team and brought a goal of paying for a World Championship trip within reach..

**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: 2022 Sponsor Plan

A	B	G	H	I	J	K
				\$24,475		10770
	Amount					
		2021/2022 Status	Contact	Received 2022	In Kind Value	2020
	<b>5 Gear - \$5000+</b>	<input type="checkbox"/>				
x	AndyMark robot parts, location	<input type="checkbox"/> Done	Andy		\$10,000	
x	Apple/SWENext	<input checked="" type="checkbox"/> Applied Online		\$16,000		
	<b>4 Gear - \$1000+</b>	<input type="checkbox"/>				
x	B&D Manufacturing (also in-kind parts)	<input checked="" type="checkbox"/> delivered	Mike Green	\$650	\$350	\$250
x	FCA Foundation Grant	<input checked="" type="checkbox"/> received check	Mica	\$1,125		
x	IN-MaC Micro-grant	<input type="checkbox"/> Done	Alisa Deck	\$2,000		
x	Haynes International	<input checked="" type="checkbox"/> sent		\$1,500		\$1,500
	<b>3 Gear - \$500+</b>	<input type="checkbox"/>				
x	Green Cube Technologies	<input checked="" type="checkbox"/> sent		\$500		
	H&R Industrial	<input checked="" type="checkbox"/> signed	AM Staff	expecting \$		\$500
x	Merrell Brothers	<input checked="" type="checkbox"/> sent		\$500		\$200
x	Jeff and Susan Williams	<input checked="" type="checkbox"/> sent		\$500		\$500
x	Rocketcat Industries (Nick and Liz)		Nick Lawrence		500 (asst. purchases)	
x	TGR Finishing	<input checked="" type="checkbox"/> signed			\$500	
x	True Precision Technologies	<input checked="" type="checkbox"/> signed	AM/ Andrew Jay	\$500		\$500
	<b>2 Gear - \$200+</b>	<input type="checkbox"/>				
x	The Andersons	<input checked="" type="checkbox"/> sent	Kayden	\$250 they need a receipt from us		
x	Brandt's Heating & Cooling	<input checked="" type="checkbox"/> sent		\$250		
x	Community First Bank	<input checked="" type="checkbox"/> sent	Lainey Schroer	\$250		\$250
x	Gorman and Bunch	<input checked="" type="checkbox"/> sent		\$200		\$100
x	Love's	<input checked="" type="checkbox"/> Applied Online	Hannah Crise	\$250		
x	Scott Robinson State Farm	<input checked="" type="checkbox"/> sent	Kayden	\$250		
	<b>1 Gear - \$50+</b>	<input type="checkbox"/>				
	Meyer Plastics	<input checked="" type="checkbox"/> delivered			\$75	

# Appendix B: CyberTooth Budget Sheet

CyberTooth Budget 2021-2022		8 students	8 mentors						
		\$36,506	\$58,174	\$37,114	\$5,000				
Description	Paid by	Contact contact ems	Paid to	Responsible	Received	Maximum Expenses	Minimum Expenses	Actual Expenses	Notes
CyberTooth Team Balance at NSC					\$9,395				
Planned Carry-Over for 2023						\$10,000.00	\$5,000.00	\$0.00	
Booster Account Balance					\$916				Balance via. email 2/11/22
<b>Event Registration Fees</b>									
Boiler Bot Battle 2021 Registration				NSC CyberTooth		\$150.00		\$0.00	
Season Registration (2 Events)						\$5,000.00	\$5,000.00	\$5,000.00	\$5000 for 2 events
District Event #3 Registration -						\$0.00	\$0.00		\$1000 for 3rd play in-state
Regional Registration	NSC CyberTooth		FIRST			\$0.00	\$0.00		\$5000 per regional (?)
Indiana State Championships	NSC CyberTooth		FIRST			\$4,000.00	\$4,000.00		\$4000 for States
FRC Championships	NSC CyberTooth		FIRST			\$5,000.00	\$5,000.00		\$5000 for World CMP Registration
<b>District Expenses</b>									
Hotel for #1 District -				Mr. Williams-NSC		\$0.00	\$0.00		Kokomo Event 2021
Hotel for #2 District -				Mr. Williams-NSC		\$2,000.00	\$1,200.00	Target under 150/ni	Columbus (8 rooms, 2 nights) (2 female student rooms, 2 male student rooms, 4 mentor rooms)
Hotel for State Championship				Mr. Williams-NSC		\$2,000.00	\$1,200.00	Target under 150/ni	Rose Hulman (8 rooms, 2 nights)
Food for State Championship						\$600.00	\$300.00		Team Dinner - one-two nights
Hotel for World Championship						\$10,800.00	\$7,200.00		Est 15 people(8 rooms), 4 days @ \$300-200
Flights for World Championship						\$12,000.00	\$4,500.00		Est. 15 people, @500-300
Trailer Transport						\$500.00	\$500.00		
<b>Marketing Items</b>									
Team Uniform	AndyMark		various						\$
Extra CT Shirts	NSC CyberTooth		Expressions			\$214.00	\$214.00		One T-shirt for students (8), One Polo for Mentor (8)
Buttons						\$110.00	\$100.00		10 extra shirts
Wristbands/Dog Tags						\$200.00	\$0.00		24 Hour Wristbands dot com - 1500 Buttons (\$260) 500 Dog Tags (\$370) Wristbands (195.00)
Lanyards						\$300.00	\$0.00		2017 price: 795.87
Toothbrushes						\$200.00	\$0.00		
Paper Handouts						\$400.00	\$0.00		Quality Logo Products dot com
Team Tutus or Alternative						\$200.00	\$100.00		
<b>Build Season Items</b>									
Additional Robot Parts	AndyMark					\$2,000.00	\$500.00		
Field Element Build						\$2,000.00	\$2,000.00		Grant for field space build and improvements
<b>Competition Season Items</b>									
<b>Other</b>									
End of Year Gifts						300	300		
Scholarships						0	0		
Student Team Dues				Students	\$24,475				Combination of fundraising and student monetary input
Fundraising: AM work sessions	AndyMark		NSC CyberTooth		\$1,720				Available to help pay for Team Dues
Win-win card sales	Students		NSC CyberTooth						Available to help pay for Team Dues
Chipotle Night Fundraiser (January)				Combs					These funds go toward the general fund
Other Food Fundraiser (November)				Annette					These funds go toward the general fund
Heritage Lanes Fundraiser									
Fundraising: other	Students		NSC CyberTooth						
					\$36,506	\$58,174.00	\$37,114.00	\$5,000.00	

Appendix C: 2021-2022 Sponsorship Levels



CyberTooth Sponsorship Levels and Recognition

	5 Gears	4 Gears	3 Gears	2 Gears	1 Gear
Sponsorship Support & Recognition	\$5000+	\$4999-1000	\$999-500	\$499-200	Up to \$199
Headlining sponsor for CyberTooth	✓				
Name associated with annual CyberTooth student scholarships	✓				
Special recognition at team competitions	✓	✓			
Special recognition in team press releases	✓	✓			
Opportunity for personal in-person robot presentation and demonstration	✓	✓	✓		
Logo featured on robot and pit display	✓	✓	✓		
Logo featured on team shirts, signs, handouts, website and marketing materials	✓	✓	✓	✓	
Opportunity for recognition and tags in a social media sponsor thank you post	✓	✓	✓	✓	
Sponsorship recognition team photo	✓	✓	✓	✓	
Sponsorship thank you letter	✓	✓	✓	✓	✓
Invitation to team Spring Open House event	✓	✓	✓	✓	✓
<i>Alternatively, let us know if you're interested in donating food for our late-night meetings, materials to build our robot, or manufacturing services - we love our in-kind sponsors!</i>					

**Sponsor Information**

Organization: \_\_\_\_\_

Primary Contact: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Sponsorship Amount: \_\_\_\_\_

Please make sponsorship check out to:

Mail Completed form and check to:

"Northwestern High School - CyberTooth"  
 Northwestern High School - Attn: Craig Williams  
 3431 N. Co Rd 400 W  
 Kokomo, IN 46901

[@3940CyberTooth](mailto:@3940CyberTooth) • [CyberTooth3940@gmail.com](mailto:CyberTooth3940@gmail.com) • [CyberToothRobotics.com](http://CyberToothRobotics.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 36-0002643. US FIRST is a 501(c)3 public charity, with Federal Tax FEIN #22-2990906. Donations are deductible to the extent provided by current IRS tax laws.