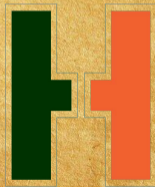


The Tale of Eight Heroines and Their Robotics Mission

Team 2602G-GOATS



Meet The Heroines



Jahnavi
Prudhivi



Rylee Blair



Emma Steir



Shanzay Khan



Tanisha Rajgor



Gurleen Kaur



Archita
Nemalikanti



Yiming Fang

Once Upon A Time...

In a kingdom not so far away, there was a crowded room of aspiring teenagers working to make the best robots possible. However, most members were boys, and the girls participating weren't as directly involved.

Due to the male-dominated environment, females weren't being treated equally or heard. So, we wanted to create an environment where girls could freely express themselves and become more empowered.

Our Kingdom!





Male Drive Teams



Club Members



Our mission began in our school cafeteria, where Yiming and Archita went around like squires seeking girls to form a team. After a strenuous journey filled with rejection, indecisiveness, and awkwardness, an all-girls robotics team was born.



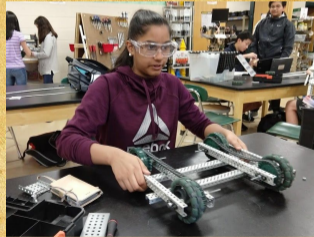
With safety glasses as our shields, and c-channels as our swords, we set off on our **GIRL POWERED** mission.



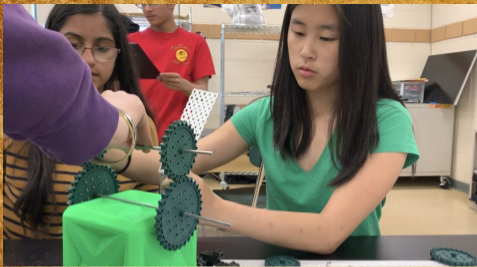
First was character development. In the beginning, everyone built, programmed, and wrote notebook entries. This method was inefficient but necessary because it allowed everyone to try each role.



Jahnvi (Builder)
coding with Yiming



Tanisha (Programmer)
building a chassis



Programmers brainstorming a way
to get cubes

Scouts
entries

writing

notebook



We began sticking with our strengths and interests. Yiming, Gurleen, Archita, and Tanisha are our programmers. Tanisha is the head programmer as she has the most experience. However, everyone codes, and Tanisha is great about teaching the C++ language.



Testing
Autonomous

Testing Drive
Code



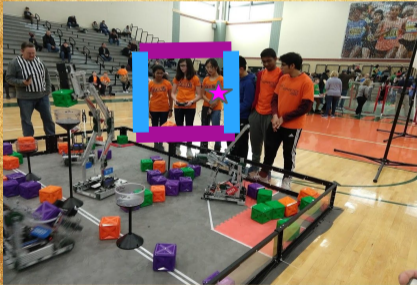
Tanisha teaching Gurleen to
code in C++

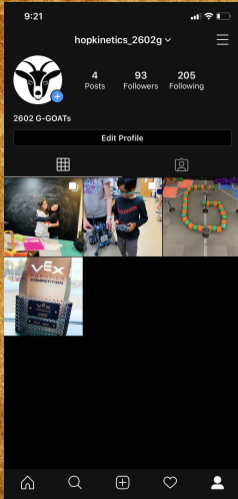


Tanisha programming



Though Yiming programs, her main role is the team leader. She knows the rules, so she's a coach on the drive team.



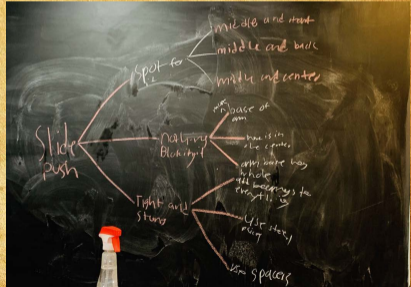
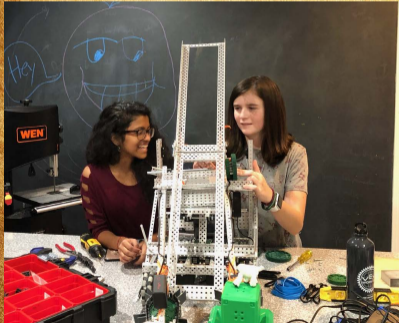


Team's Instagram

Gurleen handles our Instagram and Archita researches awards, as well as programming.



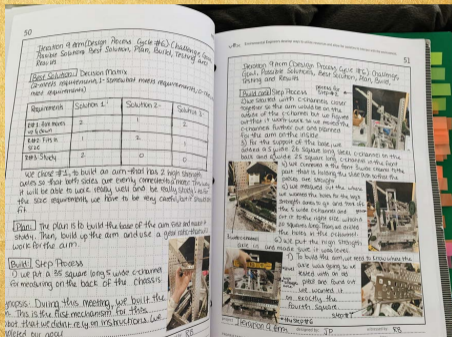
Our builders are Jahnavi, Rylee, Shanzay and Emma. Jahnavi and Rylee are the main builders since they love turning individual pieces into a functional robot!



Builders' Brainstorming

Rylee is our driver as she has the most experience and time to practice.

Jahnavi's calm persona makes her the logical choice for coach.



They are co-head "Notebookers."

Emma and Shanzay have a knack for visuals and technology, so Emma is our photographer and scout, and Shanzay is our team designer and head scout.

Emma
photographing



Scouters
in action!

Designing
sweatshirts

Excelling at individual roles allows us to multitask, but our roles are ultimately flexible. Because each member tried various roles, we all have different perspectives to solve issues.



Grinding build before a scrimmage

Throughout this robotics season, we've not only learned about each other, but we've gotten closer as a team and know who to ask for opinions depending on various problems. This mix allows our team to be efficient and successful.



Productivity after finding roles



Each member has strengths and weaknesses, but together, we balance out. All of our various backgrounds and talents allow us to look at issues from different perspectives, giving rise to new solutions.



Competition Analysis

Furthermore, we all have varying levels of experience. However, each person has an important job on the team, and everyone contributes their ideas, skills, and time to help.



Jahnvi and Rylee
writing notebook
entries

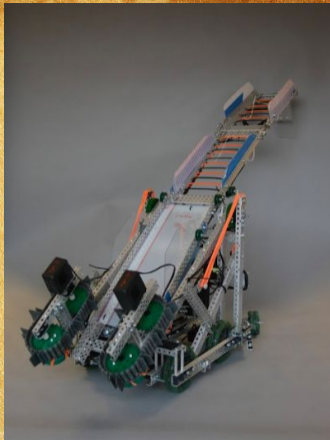


Gurleen and Tanisha
coding



Archita and Yiming
coding

Our current robot and journey were formed by the culmination of all our unique and insightful views.



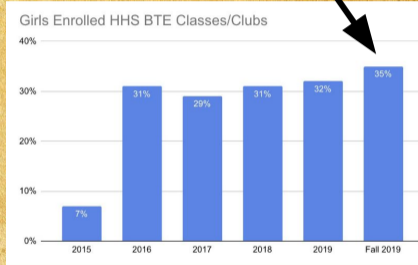
Our ragtag group of heroines were bound together by a shared belief: the GIRL POWERED cause. We are a GIRL POWERED group.



We won Judges Award at the Hopkinton Qualifier!

In our opinion, GIRL POWERED means knowing your ideas will always be heard and considered. On our team, that applies to everyone. However, it's not like this everywhere. Even though sexism in society is less than it used to be, the gender gap in STEM fields is still alive and present.

Highest amount yet,
and rising each year!



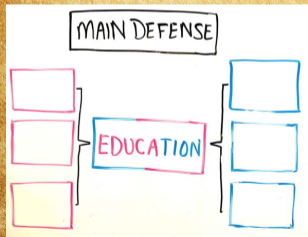
BTE: Business, Technology and Engineering

GIRL POWERED

means having equal gendered participation to create a diverse and welcoming environment.



One of our team's goals is to defend the GIRL POWERED spirit at our school. We fight against stereotypes, closed minds, ignorance, and more. Our main defense is empowerment through education.



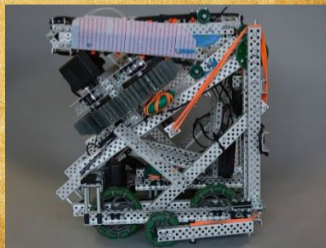
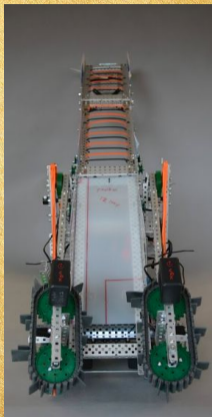
The team fighting against stereotypes (wearing black)



Believing in the GIRL POWERED cause has caused changes as our team reflects those beliefs. As said before, a major part of GIRL POWER means being open-minded to diverse ideas. Our current robot design is very different from when we started because we tried many approaches. Many of them didn't work, but each one helped us learn and improve.



From ClawBot to TrayBot



Girl Power Pledge

I Solemnly swear that I will...
help support girls around the world
to come into the STEM field, make
sure their voices are heard and spread
this message to everyone.

Yiming
Fang

Rylee
Blair

Jahnavi
Pradhivi

Emma
Steir

Shanzay
Khan

Tanisha
Rajgor

Gurleen
Kaur

Archita
Nemalikanti

Once we had a team identity and knowledge of our individual powers, we realized our mission: to spread our message of equality in STEM. While we have created our own safe kingdom, some people are still under attack, and may not have the same opportunities. It's part of our sworn duty to help them.

To spread the message, we're friendly and open with other Hopkinton teams because part of GIRL POWERED is males and females learning to work together.

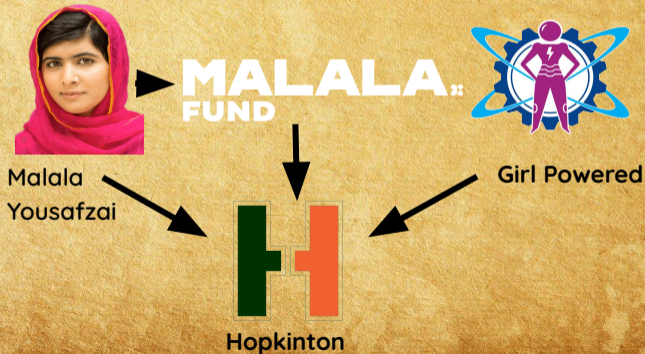


Supporting Hopkinton
teams at a competition!

Talking with
male teams



We wanted to spread **our message** farther. To achieve our end goal, we did quests like helping run GIRL POWERED day at our school, and Malala Fund fundraising.



Our first quest was helping Mr. Scott, the head of our school's engineering department and robotics club, run GIRL POWERED Day. Many girls from Hopkinton went to the high school to experience the technology and engineering aspects of STEM.

Girl Powered
Grades 4-12



- ROBOTS
- 3D PRINTING
- CODING
- ROCKETS
- MUSIC
- FUN

FEMALE + MALE MENTORS:



THURSDAY
OCT 24TH, 2PM - 4:30 PM
HOPKINTON HIGH SCHOOL C206

We teamed up with the Girls Who Code club to design and run fun activities.

- 3D Printing
- CUEbots
- GIRL POWERED Merchandise
- Coding Games
- Making Rockets
 - Shooting them with a pneumatic launcher



Emma helping with 3D Printing



Girls applying
analytical skills
to Jenga



Tanisha teaching code



Jahnvi helping build rockets

Rocket designs





Girls building rockets



3D printing!



Launching rockets with Rylee



#GIRLPOWERED

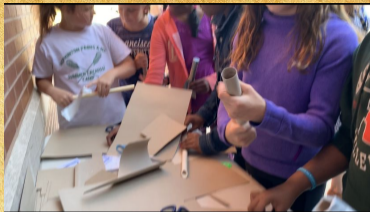


Archita launching rockets with
our engineers!



Programmers helping with
CUEBots

R O C K E T S



“The GIRL POWERED Event was lots of fun! It was nice to see different areas of STEM such as robotics, and coding. I am so excited to do robotics in high school when I get older”

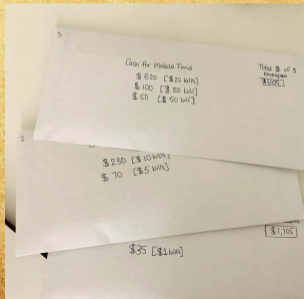
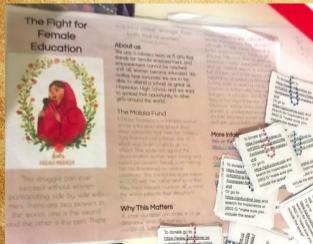
-
Disha





#GIRLPOWERED

After our first quest, we moved onto Malala Fund fundraising. The charity helps women's education around the world which is perfect for our GIRL POWERED mission.



We raised money at a Gurdwara, a Sikh place of worship, and door-to-door. We had candy, inspirational rocks, videos, brochures, and links to a GoFundMe, raising around...



\$1,200+

Heroes and heroines must often seek help from other heroes and heroines, to fight what seems to be a never-ending battle: making the world a better place. Some of the many STEM heroes that inspire us are...

Cynthia Breazeal, for her incredible work regarding computer science and robotics. She has spoken in famous venues, won international and design awards, founded and directed programs, regarding her work with AI! She has inspired us to pursue careers in the STEM fields, by aweing us with her success. Similarly, we try to be role models and succeed, to inspire other aspiring girls.



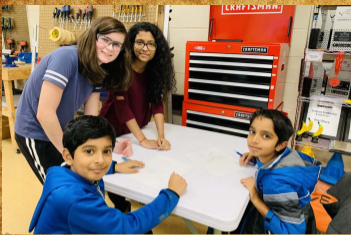
Mr. Scott, who isn't famous, nor won any big awards, but a hero regardless. He devotes a lot of time and effort into helping the students in robotics with robot problems as well as team dynamic issues. He listens and gives honest, helpful, advice. We appreciate all he's done for our team and our robotics program. Because of Mr. Scott's willingness to help, he inspires every team in our program to help each other succeed which reveals long-lasting friendships, and inclusivity. He helps teach the future of STEM.



The REC GIRL POWERED group, because they make sure every female in VEX has a supporter and a voice. They want to bring more diversity in STEM, just like our team. The REC GIRL POWERED group gave our team a grant this season to get us started in VEX. Due to their support, we could start a team, and we're very grateful. The group inspires us to be confident because of their motto to a diverse environment.



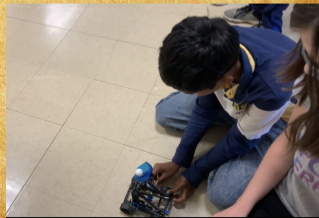
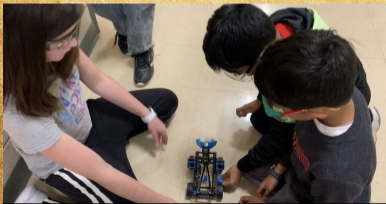
Our quests in Hopkinton!

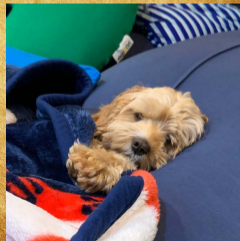


Our team
mentored a VEX
IQ team, 5171A,
HopkinsBot.



Mentoring Future High School Robotics Students





Fun VEX Times!



Our happy ending is going to Worlds in order to empower females to participate in STEM. Hopefully, seeing an all-girls team make it to the international level will help other girls realize they can be successful too!

2602 G-GOATs
Greatest Girls Of All Time





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Credits

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