



Girl Powered

2X: Powered By Personality

Our Team

We are the only all-girls Gladstone robotics team, and we are all the girls in the Gladstone robotics program (at the competition level). **Our team is new as of this year.** We started in September with only three members, but since then we've grown to six. Our team has less overall experience compared to the other Gladstone senior teams, but what we lack in experience we make up for by being organized and working well together.



Our Team Members

Agatha

Agatha's primary role is as our team's PR (Public Representative). She is responsible for connecting with possible sponsors, writing proposals, and presenting the unique features of our team and robot. Agatha organizes judging presentations so that every member is prepared and has something to talk about. In addition to this, she CADs, and she is learning how to program.

Emily

Emily is our team leader. This is her second year in robotics, so she has more experience. Being a team leader has given her a chance to have a more active role in robotics. Emily builds, CADs, designs, and knows basic programming. She also organizes team communication and leads frequent team meetings.

Agatha



Emily

Callie

Callie is our main programmer. She works primarily on the autonomous functions of our bot. This is also her second year in robotics. Besides programming, Callie has helped design and build many parts of our robot.

Angelina

Angelina helps design and build our robot. She does a lot of troubleshooting and minor fixes. She organizes and oversees our engineering notebook, but we all write in it. She is also learning how to program, and doing research on the side to improve our design process.

Callie



Angelina

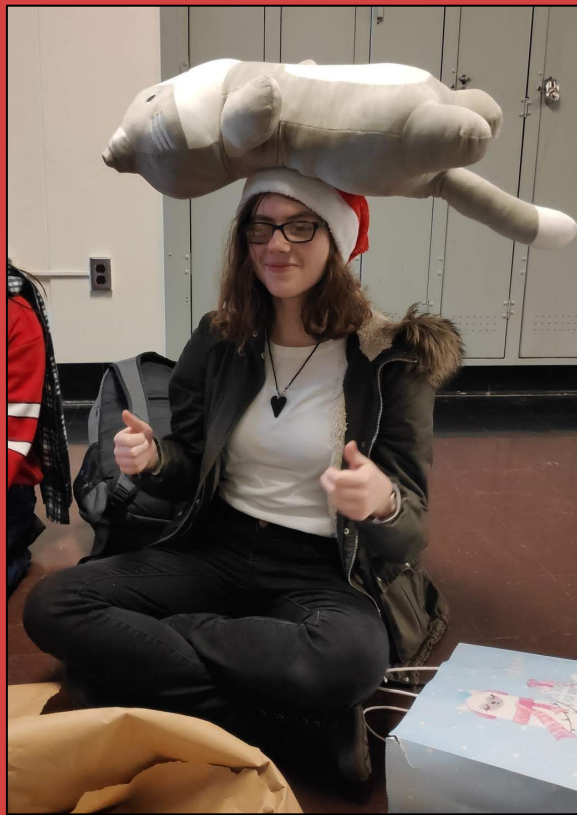
Abbey

Abbey loves to design. She enjoys looking at other robots and thinking of how those ideas could be made better. She makes organized plans to prototype, builds, and then she reflects on each change. She is also learning to CAD and CADs out ideas before trying them. Even though she's very new to robotics, she really loves the experience.

Rachel

Rachel is our team's budding electrician. She's still learning, but she enjoys repairing wires, and she helped put Christmas lights on our robot. Rachel brainstorms design ideas and sketches them with her amazing art skills.

Abbey



Rachel



Teamwork Makes the Dream Work (groan :)

In our team, we believe no one should be denied the chance to try all the roles in robotics, so we've all had a chance to find our passion within our team. Whether it's designing, programming, or building, we all have a significant and beneficial role. Without Abbey's devotion and research, for example, we wouldn't have been able to build a working puncher for our robot. Without Rachel, we wouldn't have such a festive bot for the holidays. In our team, we believe teamwork is everything. We have frequent meetings, and everyone's ideas and input are heard. To optimize the building process, we make sure to learn how each member works so that we can all compromise and adapt to each other. No one person can make major decisions for the team by themselves, not even the leader. This is how we succeed.

History of Girls in Gladstone Robotics

In becoming a Gladstone Robosavages team, we joined a proud tradition of competitive robotics. That, and 2X is not the first all-girls team from Gladstone. A few years ago there was another team of only girls, but their story was very different from ours. Recently, an alumna of that team, Neiah, came back to our school to visit us and tell her story. Much to our surprise, she related that, rather than choosing to be a team together, the teacher at that time assembled their team for them. She told us that it became clear to the team that this was for the publicity our school would get for having an all-girls team. The team received a lot of attention, but the focus was less about their performance and more about the fact that everyone on their team was a girl. As a team, we are thankful for the opportunity to choose to be an all-girls team, and to choose how we act and whether we want to draw attention to ourselves. Learning that not everyone has had that choice has made us realize what we took for granted before, and we hope no girls in the future are denied the ability to choose how they navigate STEM environments.

Our STEM Role Models

Our team has no female coach or mentor, so choosing a single female STEM role model, who has inspired us, is a difficult task. For this reason we instead would like to mention a few people in our lives who have helped and supported us in our pursuit of robotics and STEM. We look up to Mr. Chow, our metalwork teacher, for teaching us so many important things about engineering (such as: reading mechanical drawings, shaping and working with plastic, and the importance of understanding all the components of a mechanism before going ahead and using it in a design). We also look up to Neiah, one of the girls from the past all-girls team. She has continued into further education in engineering, despite being in an overwhelming minority. Her passion for engineering inspired us to persevere, and to not let others stop us from pursuing a future in STEM.

Second Competition, First Award



Despite our team being so new, we've been able to accomplish a lot in a short time. By focussing on having a good judging presentation, we were able to win the very first Community Award for BC in November 2018. We won this award because as a team, we don't only want to focus on the competition aspect of robotics. We want to inspire children and young girls to pursue robotics, so we volunteered at a daycare centre called Wonder of Learning to present our robot and speak about robots in general. We also visited Zaber Technologies (an engineering company in Vancouver) to see what a career in STEM looks like.

Our team decided to organize volunteering at Wonder of Learning, a daycare centre, to show younger kids what it was like to be in robotics. When we brought the robot, all of them got a chance to test it out. Some of them asked thoughtful questions, like how we programmed it and what different parts of the robot did. After the showing was done, they drew pictures of their ideal robot. Some were more serious and had an idea of how theirs worked, while others were more artsy and fun. In the end, they all seemed to enjoy the showing, and we hope we inspired them to be even a little interested in the STEM world.

Wonder of Learning



A girl drew a picture of her ideal robot - one with Christmas lights, like ours!

Zaber Technologies

-
Company Tour



Wonder of Learning

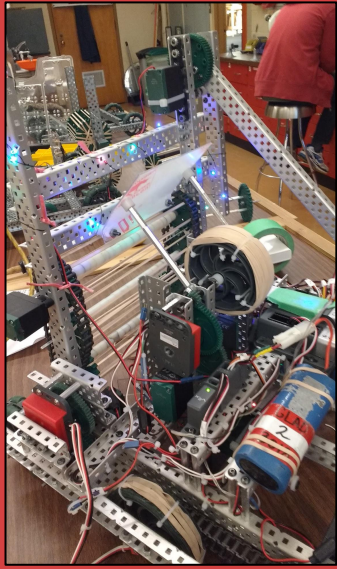
-
Volunteering



Third Competition, Second Award



Third competition was at West Van Secondary School. Throughout the year, our goal has been to continue to improve at each competition, but we also want to have fun and enjoy the experience, which can sometimes be the biggest challenge we face. For this competition, we decided to honour our shared love of Christmas, and our team mascot (a happy little Christmas tree aptly named, “Bob Ross”) by wearing festive hats and putting Christmas lights on our bot (this was a chance for us to learn some basic electronic skills). We won the Judges Award for our team spirit and our well-planned presentation.



What Does Girl-Powered Mean to Us?

For us, being girl-powered means being an efficient and focused all-girls team without sacrificing our personalities and our creative expression. We aren't afraid to be silly, to have fun, and to be ourselves, even if that's very different from other teams' approach (girl-powered and otherwise). We are grateful to be a team in a time where we are encouraged to be ourselves, and to inspire others to do the same. For our team members, girl-powered means having high technical and competitive goals *as well as* working together, listening, learning, making new friends, and having fun. For another team it may mean something totally different, and that's why it's important that every girl gets to be themselves, not what other people want or expect them to be. Being girl-powered means simply being ourselves.

Girl Power In Action: A Real Life Example

For us, making new friends in robotics is of high importance. At our competition at West Vancouver, we had the opportunity to choose an alliance partner for the finals (this was kind of a big deal for us). We chose a team we got along well with, and through them we were able to share our festive spirit.



Credits

Members:

- Emily Guan
- Abbey Perley
- Callie Cheng
- Agatha Milley
- Rachel Chao
- Angelina Tran

Team Name: Robosavages 2X

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