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Team 1868X

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From a young age, many of us remember always feeling a pressure to conform, whether it be to wear trendy clothes, not speak our mind, something or the other to bring one down. Some "interests" one might see in daily life would be stationary and fashion, all of which might still be more acceptable than a girl playing video games. Phrases such as "girl power" almost exist as an afterthought in many fields, with currently only 8.5% of engineers being female. When words like those come to mind, some may think of stereotypical colors - pink for girls, blue for boys. No matter the place, stereotyping is heavily apparent in many fields, yet we tend to imagine strong, inspiring, female leaders breaking barriers set out for them.



"[The veteran team members] were looking for [rookies] who were trying their best, being innovative, participating, and judging how they would fit into the troop." - Sophia L.



In our team, we do not limit ourselves to others' expectations, instead we create opportunities for everyone to participate, inspiring many. Together, we find more chances to speak up and have freedom from stereotypes that are often seen in the field of robotics. As a team, we tackle problems and challenges, and allow ourselves to think freely in a creative environment. To be a part of Space Cookies, a Girl Scouts troop aiming to encourage the next generation of female engineers to pursue robotics, the girls go through a rigorous process. Though there are many girls interested in joining the troop, in order to be fair to everyone involved, the recruitment process is started by advertising with flyers. Upon receiving applications from interested girls, considerable amounts of time are spent planning activities that would help the girls engage with the troop while being introduced to the basics of robotics. Once the workshops and activities were complete, the veteran girls narrow down the list of potential rookies based on their interests, level of participation, innovative ideas and how they would fit into the troop. The list is then further narrowed down based on the inputs received through their application, resulting in the troop we have today.

"Not everyone thinks the same in a diverse setting — you get to learn things you didn't know before." - Thu B, Team 1868X

The diversity in our squad affects many things, including brainstorming sessions, building of the robots, and much more. Our diverse range of ideas and opinions has caused our creativity to skyrocket, improving our engineering process by including ideas from all parties and strengthening the basic values in our robot. The differing perspectives help highlight the flaws in plans that may otherwise have seemed good. This is also reflected in our diverse skill sets, with some being stronger in building and others in programming. These make it so that when we collaborate, our final product has more strengths, making it more likely to succeed. Some people might think that with so much diversity, arguments may break out over our different thoughts, ideas, and cultures. Nevertheless, our different backgrounds do nothing to bring down team chemistry with it, instead encouraging conversation between members about



their respective cultures, holidays, and food. To sum it up, our differences in background positively affect our team spirit as well as our final product.

"I believe the diversity of perspective changes our robot design since each of our teammates have unique talents. This brings more ideas to our team and makes it more interactive." - Lily T, Team 1868X

In our team, we have the creative freedom to explore new roles, expanding our horizons. In engineering, having knowledge of both our hardware and software is important, and the fact that the things we are learning can be implemented in a real life career collectively appeals to our



curiosity. Throughout the building process, roles constantly switch and change, with builders going on to learn programming and vice versa. Everyone takes turns in note-taking and/or our Engineering Notebook as well, which leaves us with the skills to be able to communicate our findings and journey. The abilities we gain helps us prepare for future adversities, whether as a team or individual.

"Robotics has taught me many [hard and soft skills], from how to organize my code, to how a nut driver works. Without my mentors, I doubt I would have learnt any of this." - Ruchi A, Team 1868X

As a team, we do not have a specific STEM role model that we look up to, and find ourselves inspired by our mentors instead. Even (the few) dads who volunteer their time are quite helpful. All the adults ensure that we are comfortable when working together, while also providing small but important ideas while brainstorming. This often changes the entire process, with new revelations coming to mind at the sight of a roadblock. We are given a lot of creative freedom to work with, but know that we are in a safe environment, as they can intervene when necessary, and ensure that we know anyone can always ask them for help. Through their actions they teach us the importance of diversity, with their contributions strengthening our creations for the better.

"When entering my robotics team, I immediately fell into the rhythm of things, unlike other places where the girls consisted of the journaling or outreach roles." - Medha C, Team 1868X Today, many women are unable to reach higher up positions concerning management in their workforce. The few lucky ones are often promoted as figureheads, meaning that they are only given a high-level job to show 'diversity' in the company. These women almost feel as if there is a glass ceiling above them that they cannot pass, with their goals on the other side. While society has begun to progress from the idea that engineering is a male job, the lack of diversity in this field continues to be daunting. Thankfully, the people around have given us strength as we break these barriers in robotics. Our team gives each other the support that we need to thrive and grow on our own paths, and we collectively refuse to bow down to the stereotypes placed on us.

Works Cited

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All other images taken by our team