Space Cookies: A Sisterhood

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Space Cookies 1868T

The STEM field is highly male-dominated, and to this day, women in this field continue to face discrimination and are underestimated and unacknowledged in the field. Our team believes that girl power is about empowering young girls and women to pursue their goals despite the discouraging messages that exist to put women down. We mirror these ideas in our approach to robotics as an all-girls robotics team to encourage more girls to pursue a STEM career.

Our team has taken initiative to encourage more girls to go into the STEM field by hosting outreach events where we introduce others to the STEM field, particularly young girls that could have been intimidated or repulsed by robotics, as it is widely considered a male interest. As Space Cookies, a team whose name honors both our NASA and Girl Scouts sponsorship, we hope to be a positive influence for other young women. One of our outreach events is located at the Hiller Aviation Museum's annual STEM fair and open house, the "When I Grow Up" event, where we host a square-bot workshop for female elementary school students and staff the exhibits and booths. At the Girl Scouts' Golden Gate Bridging event, we share our enthusiasm for robotics with the event's seven thousand participants through the ceremony of crossing the Golden Gate Bridge and attending the Chrissy Field activities and friendship circle (the largest west of the Mississippi). Through our various outreach events, we demonstrate and

teach people to drive multiple robots, as well as encourage curiosity and invite others to ask questions and learn more about becoming involved in the STEM field.

On the Space Cookies team, we take various steps to build an inclusive work atmosphere where we can all learn different skill sets— from designing to building to programming. First, we asked everyone on the team their preference: hardware, software, or both. However, though we usually follow our preferences, we learn both sides along the way. For instance, during a coding workshop last year, Lauren — one of our mentors who is a material scientist at NASA — taught us the basics of VEXCode. Additionally, we all learn strategy when we attend competitions and discuss our alliances.

On our team, we bring together a diversity of perspectives, as we each hail from different backgrounds including visual arts, sports, and performing arts. These perspectives, backgrounds, and experiences, are our most valuable team asset because everyone can provide a new approach to a challenge. As an all-girls team of peers, we feel comfortable sharing our ideas and showing each other the trust and respect we each deserve. From our easy and open communication, and varying skills, emerges a wider range of ideas that help us to build our visionary robots.

The STEM role model who inspires us just so happens to be the founder of our team and the Space Cookies program, Dr. Wendy Holforty. She dedicates a minimum of five hours a week to attend our regular meetings, and additional time assisting at our frequent outreach events and competitions. Her philosophy of learning over winning shines through our collective efforts. Wendy creates a team culture that focuses on developing teammates' skills and understanding coding, and building, rather than on trophies. Her philosophy of learning over winning shines

through and reminds us that our end goal is not to win, but rather to reflect on and connect all we have learned and to implement that knowledge into improving as well.

Here at Space Cookies, we are all sisters. Instead of competing against each other, we help each other. We do not focus on winning; we focus on making a positive impact while learning and having a good time. To us, robotics comprises a learning experience, rather than seeking prizes and making it to qualification rounds, allowing us to come together as a girl-powered team.

Here is a picture of our troop at the "When I Grow Up" outreach event.