

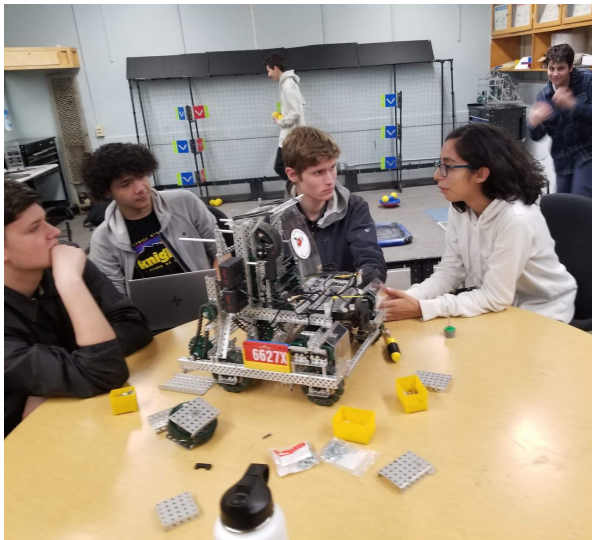
# Team 6627X

Knight Time Bots  
Foothill High School  
Technology & Engineering Program

## Girl Powered

January 2019

Team 6627X wants to be able to inspire underrepresented students to step out of their comfort zone, defy the barriers and pursue their passion; to be part of the change in developing a world where the next generation can freely choose how they want to contribute to the world, without being discriminated or discouraged due to their gender, sexuality, ethnicity, or other



characteristics of their background. Girls are unfortunately a clear minority within our robotics program with only five women out of the total of thirty members, but even so, we have a mission to promote the value of women and their credibility to fully earn their respect and show that they are essential members of the team. We wish to prevent girls in STEM from being discriminated, insulted, and degraded due to their gender and position as female team members and leaders in the male-dominant field. We want to stem the flow of scornful

words that has the chance to affect them deeply, causing them to feel discouraged, feel like as if they do not deserve a role as an engineer, or feel as if women will always be inferior to men within the field of engineering. The fact of the matter is that women are more capable at engineering than society leads them to believe and can easily match or even exceed the skills and talents of men within the field. Our team is thrilled to empower the value and importance that women have in the STEM field.

The 2018-2019 VEX Turning Point season incorporates the entirely new V5 system architecture, leading to many teams that are left struggling to figure out the new system program and operate the new hardware. Our team was able to obtain the V5 hardware in early September, and throughout four months of competition, experimentation, and discussion, we've learned the intricacies of the system. We've worked through our mistakes, frequented forum posts, and researched videos all to strengthen ourselves as a team. And we haven't withheld this information for ourselves.



We've pursued our mission through various activities and outreach efforts, ranging from offering help with programming and building to teams to volunteering at various schools and libraries in the region to promote not only high level robotics but also STEM education. As an experienced team with great past records (worlds finalists, state champions & finalists), we welcome any outside organizations or private teams to visit our robotics lab for any help. We've helped teams from Tennessee practice and prepare their robots for an upcoming local tournament, assisted an all-girls team in the transition from legacy motors to V5 hardware, and taught middle school students the basics of C++ to help them in their programming. We've been able to help many with gaining the confidence and knowledge needed for this year's season and the coming years of the VRC, skills which will have a significant impact on their future in the real world.

With the goals and missions of our team, we believe that Girl Powered is imperative to the STEM field today. The collaborative minds of men and women come together to create the ultimate innovation in a manner that betters all of society. Our team is inspired by Girl Powered and the ultimate mission of the organization, "Redefining the Face of STEM." We believe that underrepresented female engineering students would be able to develop and improve their talents and undergo personal growth through participation in VEX Robotics. The developments from Girl Powered and teams like ours will ultimately reform the STEM field and make women equally represented in today's otherwise very male-oriented field.

