

# *The Roboregents and Their Journey*



*Created by: Deanna Rice and Kaitlin Kelleher*

The smell of coffee, motor grease, and stress; this is normally not something someone enjoys bright and early on a Saturday morning, but as strange as it sounds it is our favorite kind of day. Robotics is something that has changed our lives; through dedication, passion, and practice we have developed the skill to be engineers.

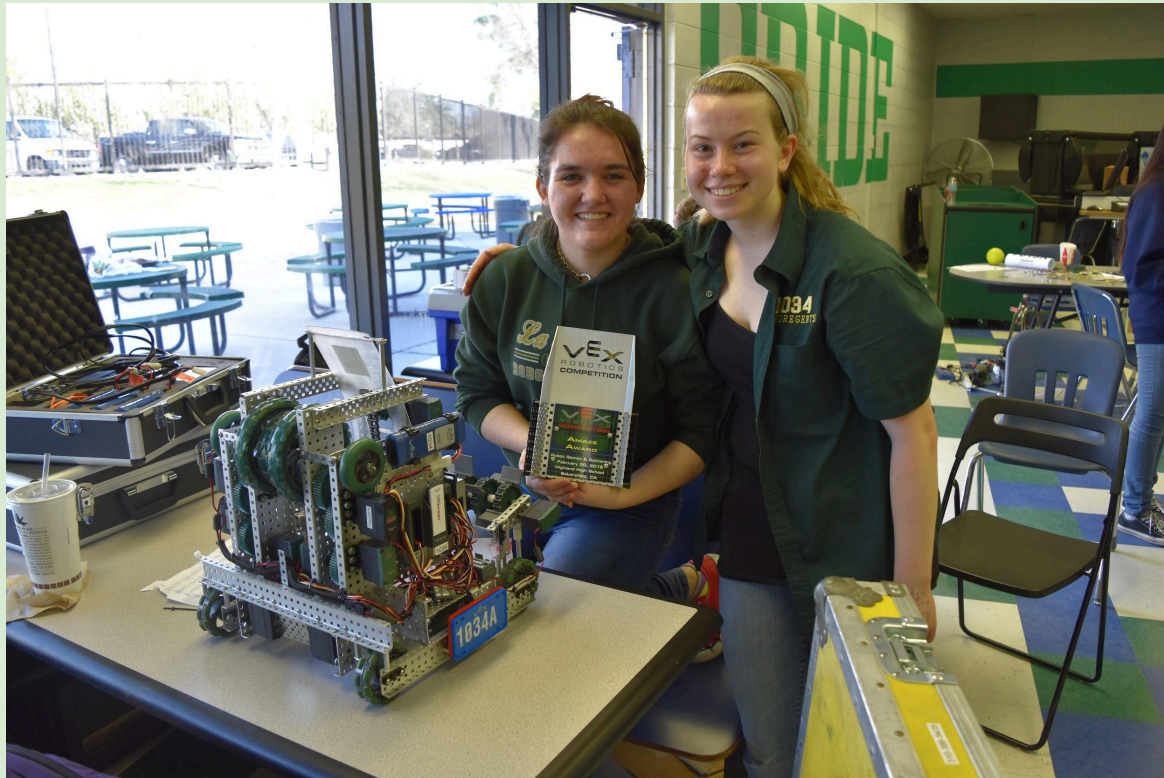
Ever since I (Deanna) was little, I have been curious and imaginative, as any young engineer would be. I always wanted to create things from my imagination, which led me to find my passion for robotics. Robotics allowed me to express these things because of the opportunities to solve problems and think creatively. However, when you are the team captain and mentor, it can be difficult. I have been team captain of the robotics team for five years, in charge of both the robotics club and competition teams. Without a mentor, I needed to step up at a young age to not only lead my peers but teach them. I have positively influenced my team members through demonstrating the importance of hard work, determination, and perseverance.

I joined the robotics team then quickly became team captain of the high school team in eighth grade. I was dedicated to the program and was able to lead



my team to the State Championship in my first year competing. I spent countless hours practicing, programming and rebuilding my robot; I would lose track of time completely. I would be out in my garage many nights until two or even three in the morning, while still thinking it was ten p.m. I ultimately believed that I could be a girl in STEM and taught myself how to build and code.

I began to publicize the team more and was able to have girls join the club and competition team. Kaitlin Kelleher (KK), a seventh grader at the time joined and we now make up team 1034A. We continued to improve together and spent almost every weekend competing at local tournaments or practicing to master the challenge.

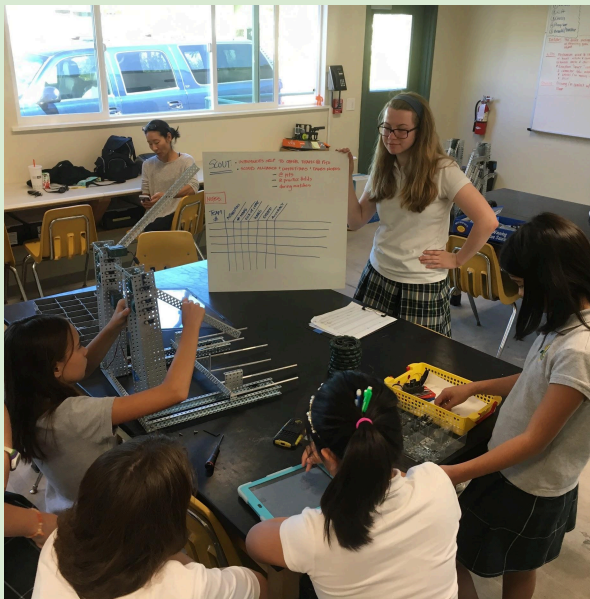


However, as you can imagine, a seventh grader and a sophomore have a couple communication issues. One, KK had no idea what robotics was, and two, I had no idea how to express my designs to another person in words. We spent almost every day of every week designing, brainstorming, building, coding, and practicing in order to improve and be the best we can be. I qualified for the California State Championship two years in a row, and KK and I have qualified three more years in a row together. Making it a grand total of five years in a row now. We finished second during my sophomore year and during my junior year we won: Excellence, Programming Skills, Build and Sportsmanship; and we are excited for the 2017 CA State Championship in Pomona, where we will defend our current titles. In addition, we have been able to compete at the World Championship in Kentucky in 2015 and 2016.





Robotics has changed our lives because it has taught us not only time management, teamwork and problem solving, but it has allowed us to create a friendship that never would have happened without robotics and we have been able to find our passions and help one another in the process.



After winning the Vex Robotics California State Championship, KK and I put all of our efforts into expanding the program. By advertising and providing demonstrations, we were able to encourage girls to join the program. Over the past six months, we have made my team of two into a team of fifteen. We are still in charge of all these girls between the ages eleven and eighteen. We are still in charge of organizing competitions, meetings, club activities and teaching. But we focus on teaching everything that one needs to build a

competitive robot, including designing, prototyping, competing, programming, developing and creating an engineering notebook.





After expanding the STEM program at school and creating a robotics class for sixth graders and a required programming class for high schoolers, KK and I decided to expand our robotics knowledge to our community. We began to go to local elementary schools, bringing our robot in the hopes of inspiring young girls to become more interested in STEM and to create robotics programs on their campus'. In addition, I also have put in almost 600 hours of volunteering as teacher's assistant at these local public elementary schools. I help teach the students basic mechanical and electrical engineering. For example, I have helped create electrical circuits with light bulbs, paper airplanes, and taught them circular motion with a spinning bucket full of water.



Throughout this experience, KK and I have been able to grow intellectually and develop a lifelong friendship. When I started robotics I did not think that I would be running the club when I was only thirteen years old. I have learned an immense amount of advanced engineering and how to think critically; I have also found my passion and determined that I will major in mechanical engineering in college. Through my experiences, I have developed the capabilities to be a servant leader in my community which has helped define one of my values. Perseverance is never giving up even when what you are doing is difficult. To me, it used to mean working hard, but I now understand that it is much more; it is determination, imagination, enthusiasm and passion. With perseverance, I have been able to shape the STEM program at my school, and I will shape what perseverance means not only to me but to others, through innovation, imagination, and creativity.

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## Team 1034A

Members and roles:

- Deanna Rice- Senior
  - Team Captain, Builder, Driver, Programmer, Notebook Designer
- Kaitlin Kelleher (KK)- Freshman
  - Builder, Scout, Programmer, Field Manager (putting in driver control loads and tracking field activities)

Thank you to Google Docs for allowing us to create this journey.