

Gir / Powered.



# What Matters To Us Most:

The Girl Powered Mindset

Written/Designed by Alina Ludian Of Team 7983D Bakersfield, CA

### **Girl Powered**

Women in STEM today reach heights unimaginable compared to what representation we had many years ago. Breaking away from society and holding initiative was what brought ladies to success, as do ladies in the STEM force today. Though our position in society's view may have changed, our techniques and determination have not. We are women who come together to reach further than ever before thanks to our predecessors, as a symbol of gratitude and respect for their fight. Thanks to the women who took a step forward into uncleared territory centuries ago, women today are now able to stand forward, giving their all with a mindset that has helped us overcome centuries of ridicule and public doubt. Because that mindset, is what matters to us most.

### Meet the Girl - 7983D

My name is Alina Ludian, I am a part of team 7983D from Centennial High School in California. I'm a senior at 17 years old, I'm in my 4th season of VEX where I've played In The Zone, Tower Takeover, Change Up, and now Tipping Point. I am the only female member of team 7983D, but my own experience as well as working with other women in the STEM field has brought me confidence to bring forth my ideas in any situation.

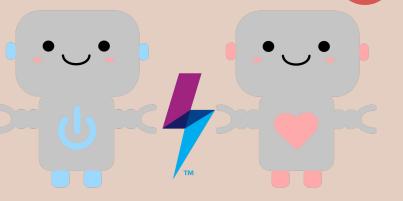


## How Do I Define Girl Powered? ( - + P

When I think of the phrase Girl Powered, I think of what women are able to do today from female sacrifices in the past. Their accomplishments affect the way women are seen today in all fields alongside STEM, and it's incredible to witness. Empowerment of women in STEM today has personally pushed me forward to be the girl I want to become, and many more I can presume. It has taught me from a young age that as long as we put in effort, we will be able to reach heights beyond what was imaginable for many women years ago. To me, Girl Powered is not only a theme, but a mindset as well. Adopting the idea of women powering the STEM field has become a part of the reason I push myself inside and outside the classroom today, I want to become a person I can be proud of and see myself as a women in STEM through my and others' hard work.

### Inclusivity and Diversity on Our

7983 Rateam that values diversity in many ways. Though I am the only female member of this team, I have found ways to incorporate female diversity within our teamwork. In my past VEX experience, I have had the ability to work with many skilled and  $\rightarrow$ talented girls in the field, who have both inspired me and brought me ideas along the way. This was the 'blueprint' for the mindset I have created for myself; even if I am not surrounded by females on a project or a team, I have found ways to use my abilities to contribute to a final goal, something everyone, no matter their identity, works towards.



I believe that everyone should have an equal pportunity to contribute to any field, regardless of whether they're female or not. The Girl Powered mindset is about rising to the challenge as a female, but not dominating it.

### Our Team Makeup







#### Alina Ludian LEAD NOTEBOOK AND BUILDER

My past experience in VEX has given me strengths in **game analysis** and **strategy development**, as well as different **building techniques**. My interest in **mechanical engineering** has allowed me to develop a strong understanding of the **technical side** of our robot.

#### Karan Nimmagadda LEAD PROGRAMMER/CAD AND BUILDER

Karan has been a valuable asset to our team; with his determination to continuous **out of the classroom** dedication, he has always been able to keep up to our continuous changes to our build with **speedy programming updates**.

### Our Team Makeup



#### Max Geissel MAIN DRIVER AND BUILDER

Max has dedicated **build time** as well as practicing many hours on **practice fields** trying out **strategies** proposed by the rest of the team.



#### Damien Morales BUILDER

Damien is always **on time** to class and **ready to try out** any **new ideas** the team has proposed/decided to change about our robot.



#### Oliver Cantrell BUILDER AND PROGRAMMER

Oliver has a **great ability to adapt** to any task given to him, carrying both **building** and **programming** as well as **backup driver** whenever we need his help.

### The Benefit of Perspective

Though our team has defined roles, we all share the same responsibilities. Our positions are very flexible, we never block access to a job needing to be done. We are all versed in every area of VEX Robotics due to experience in this competition, and actively use each other's help and advice in many situations. We often have class periods where we sit together and discuss how our team is moving forward; this is a great way to gain insight on the each other's ideas, and offer or obtain feedback to questions we may have had.



### The Benefit of Perspective

ROBOTICS COMPETITION

At 7983D, we want to make sure everyone has a voice in opinions and changes, so we encourage everyone to engage with each other. Our team members are here for each other, and this is what leads us to have diverse team chemistry. Our abilities to communicate is what I believe led us to early success, and at the present moment as well.

Girl<sup>4</sup>Powered

### Speaking of Success...

The Tipping Point season this year has brought us to our expectations over and over thanks to the contributions of each team member. Our competition season began with the usual League Scrimmage, where our team walked away quite proud of our performance. The next competition that was to come was the traditional RoBOOTics Spectacular,

The annual competition bordering Halloween. This was the competition that we secured our place in the State Competition through our Skills placing. It was only the second tournament into the season and we already qualified, we walked out feeling ecstatic.



### The Effects of Team Chemistry

We want to make sure to maintain a diverse chemistry among our team, it's what we all know will bring us to compromise. This is why we're so open with each other and what roles we play on the team. Having an assigned role and being confined to a role are two different things, and we lean away from the latter. Being a member means that **you work with us** towards a **cornmon goal**, but

also focus on your own learning and strengths. We strive to make each opportunity a learning one, by diversifying our team, we can work together alongside working on ourselves.



We want to allow all voices to not speak at once, **but to be heard**. Proper team communication was what brought us to success early on in this season, and without it, our robot nor our chemistry may not be what it is today. We are grateful to **work** with each other.

### STEM Role Model

My STEM role model is Marie Curie. She is a very special person to me because of her origins. Growing up, I looked up to her for being an accomplished physicist and chemist from Poland. I myself am Polish, and it's hard to hear large breakthroughs in scientific history related to those with Polish origins, primarily because of Russian rule. On top of being from my country, she is a woman of knowledge and empowered me to look into physics for the first time. Curie had received many awards and recognitions from other countries, making her the woman I always kept close to me as I planned to enter the STEM area in my first year of high school.



ТМ

Poland was never a tier country to grow up in, especially in her Doctorate in Physics in 1903, and succeeded her husband Pierre Curie (who was a professor in the School of Physics, 1894), as Head Professor of General Physics in the Faculty of Sciences, being the first woman who had ever done so, as

Marie Curie went on to do amazing things, her findings on the remedial uses of radium were preached during WWI, and post war, she was able to raise a phenomenal laboratory in Warsaw, with the help of other countries' funding purchased radium for use in the laboratory. Poland was always a poor country, the establishment of this laboratory is a major testament to her influence worldwide, as well as Poland. She along with her husband earned the Nobel of the Royal Society in 1903, in 1911 she received the Nobel Prize in Chemistry. On behalf of the women of the United States, President Warren Harding of the US presented her with a gram of radium in recognition to her life studies.



### Credits

Author: Alina Ludiar

<u>Participants:</u> Karan Nimmagadda, Max Geissel, Damien Morales, Oliver Cantrell

<u>Presentation Template:</u> Designed by Alina Ludian, IbisPaint X

Girl Powered Assets: VEX Robotics, RECF

Submission Title: What Matters To Us Most: The Girl Powered Mindset

<u>Team Number:</u> 7983D

Bibliography

<u>"The Nobel Prize in Physics 1903." NobelPrize.org.</u> https://www.nobelprize.org/prizes/physics/1903/marie-curie/biographical/.