## 39B GOGLI: GIRL FRONT - NEW HORIZONS

Bloomfield Hills, MI | 2022-2023

Grace, Sophia, Angelina, Angela, Summer Aaron, Charles, Larrance





# Mission Statement

39B Gogli advocates for an uplifting working environment by emphasizing diversity and equality. Through our robotics experience, we inspire more girls to reach new heights in a largely male-dominated activity.

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#### Members



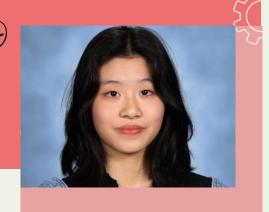
**Grace Zhang** 

Main programmer, engineering notebook writer



Sophia Yang

Team manager, lead scout



Angelina Kou

Scout, engineering notebook

#### Members



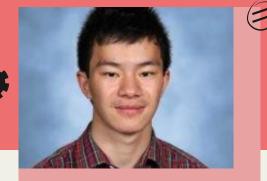
**Summer Su** river, builder, engineeri

Driver, builder, engineering notebook writer

Angela Zuo
Scout, communications
manager

#### Members







**Aaron Wang** 

Charles Huang Larrance Xing

Programmer

Team captain

Driver

39B Gogli was first formed with members Grace, Sophia, Angela, Charles, and Larrance during the 2020-2021 season. We added Angelina in 2021-2022, and this year, new sophomore members Summer and Aaron joined us, making a team of 5 girls and 3 boys.

Each person has a different role and brings unique skills to optimize our team's success. Our team members all have different areas of expertise, including the engineers who build and design our robot, the drivers who score high under pressure, the programmers who create our driver and autonomous code, and the strategists who pinpoint our competition strengths and weaknesses.

However, we don't just remain in our own separate circle. We always communicate with each other, and everyone contributes to the team in their own unique way. Our new members provide innovative ideas by thinking outside the box, while our veterans provide invaluable experience and years of VEX expertise.

### **Our Team**





# O1. The Meaning of "Girl Powered"

#### What is "Girl Powered?"

To our team, "Girl powered" means much more than a slogan and simply including girls in a male-dominated activity. It is our pride for the path that female pioneers have paved to create opportunities for girls like us, especially in the STEM field. It is the open-mindedness in our team that allows us to appreciate a person's character, regardless of gender or race. Most importantly, it is our desire to build a society where all girls are all confident to be proud of who they are, to share their own opinions and ideas, and to be viewed with respect.





# 02. "Girl Powered" on our team

### 39B Gogli - Girl Powered



Our team strives to create an equal environment where everyone's voices are heard, regardless of gender. We support and respect each other's ideas, opinions, and creativity through discussions and compromises. It is our unity, trust, and diverse minds that drive the team forward, not gender. Being in a male-dominated field like robotics, the trust and support from 39B Gogli not only gives us girls the confidence to contribute to our team's success, but also makes our robotics experience so much more enjoyable.



# 03. Diversity of Perspectives

### **Close Bonds Through Robotics**

Our diversity allows us to include different perspectives and methods of thinking in our team interactions. From driving to physics computations to scouting, our team members complement each other with our unique points of views and mentalities.

Other than being teammates, our team is a tight-knit friend group. We share many humorous moments in our downtime, even enjoying a match of pool once at a tournament. These light-hearted moments strengthen our relationship and team chemistry.



### **Using Our Combined Skills**



Our unique combination of diverse skills is most vital during team interviews. We start with an introduction by Sophia, our team manager to set up the structure of the interview. Since some of us shine the most when presenting the technical details of the robot, setting up a good frame for them is crucial for our success. This was only possible because we think in complementing everyone's strengths. Our interviews have improved significantly since we allowed our members to focus on what they are best at.

### Playing to our Strengths

In our labs, we divide both our work time and tasks equally. In our initial design period, the designers, builders, and programmers equally rotate between lab sessions, as they go to the week's lab days on Wednesdays, Thursdays, and Sundays. Then, as we move into fine-tuning our strategy and robot, we increasingly prioritize our driver going to the lab. Last year, during the pandemic and online VEX robotics, our members were scattered across the globe and could not meet. From this experience, we realized that balancing our time is crucial for true cooperation. With careful planning, we always have different sections of the team working together to discuss and carry out ideas.





# 04. Diverse Experiences -> Success

## 39B Gogli - Girl Powered Different Perspectives

Our diverse team also has a wide range of experiences, from members who are in their first year of robotics to senior veterans who are in their seventh year. Under the guidance of our veterans, our new members are able to find a role in the team that fits them best.

Sophia has now gained 4 years of experience from VEX robotics. With her extensive set of social and management skills, she takes care of a variety of tasks on the team in addition to being the main scout. Being a senior member, she guides new members like Summer and Angelina in the lab and at tournaments.

Grace is also a robotics veteran. With seven years of experience in VEX and Robofest competitions, she knows the ins and outs of robotics parts, code, and secret strategies in games. She kindly provides our newest members with guidance and support.

Summer is brand new to robotics this year. At first, our team helped her with the rules and basics of VEX. As she gained a better understanding, veterans like Grace helped her try many different roles. Summer found a passion for building and is now also playing a crucial role in the drive team. More importantly, though, is that she truly became a part of our team. Her humorous energy brings us together both in the lab and during stressful competitions.



# O5. Our STEM Role Model

#### **Our STEM Role Model**



Ms. Kelly Katz is a math teacher and robotics coach at our school, and is a major inspiration for our team. Graduating from Purdue University in 2001, Ms. Katz was one of the TWO WOMEN out of NEAR 1000 graduating with a math degree. Coming from a time where STEM was heavily male-dominated in every aspect, Ms. Katz strives for an inclusive and diverse environment in the math classroom and robotics lab.

She holds the same core values as our team: to better the future generation of young female critical thinkers. We are motivated by her infectious energy and dedication to encourage girls in STEM everyday.





# Thank You!

Pictorial Essay by Summer Su, Grace Zhang, and Sophia Yang

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