



Team

# 76209

## History of VEX at SSIS

Documentation of the years 2016 - 2023



Version 0.15

2023/08/02

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# First team 76209 in season 2016-2017

From [the website](#) :

The SSIS VEX Robotics club began in 2016 as an informal competition towards the end of the year. Because of the strong interest in the activity, the club was officially founded the following school year.

Who made this all possible? The coach from 2016 on: **Evan Weinberg!** In 2018 his team won an excellence award for promoting VEX in Vietnam. Two years later the first national championship in Vietnam was held at SSIS!



## 1. Season 2017-2018 - In the Zone

The team built their robots at SSIS, and two teams B and G visited Bangkok for a local competition. In summer 2018 Team G went to VEX World in Louisville, Kentucky. Here are the first team members:



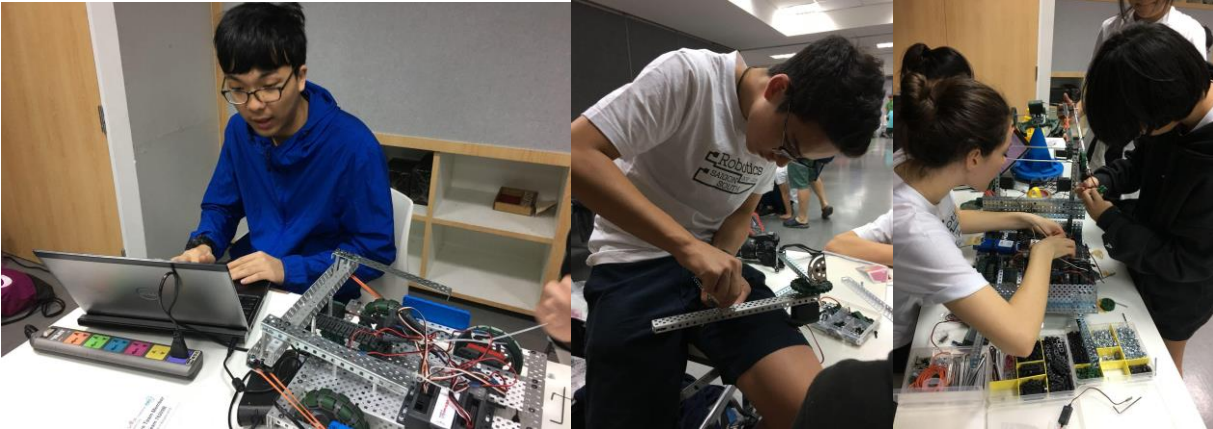
Hina Sekine, Eun Sol Kim, Sierra Ross, Forrest Keller, Evan Weinberg, Shin Young Hong, Sunghwan (Max) Kim, Jayden Mecham, Peter Bui

## 1.1 Bangkok

Team B and G visited on February 3rd, 2018. Details: [Overview Video](#).

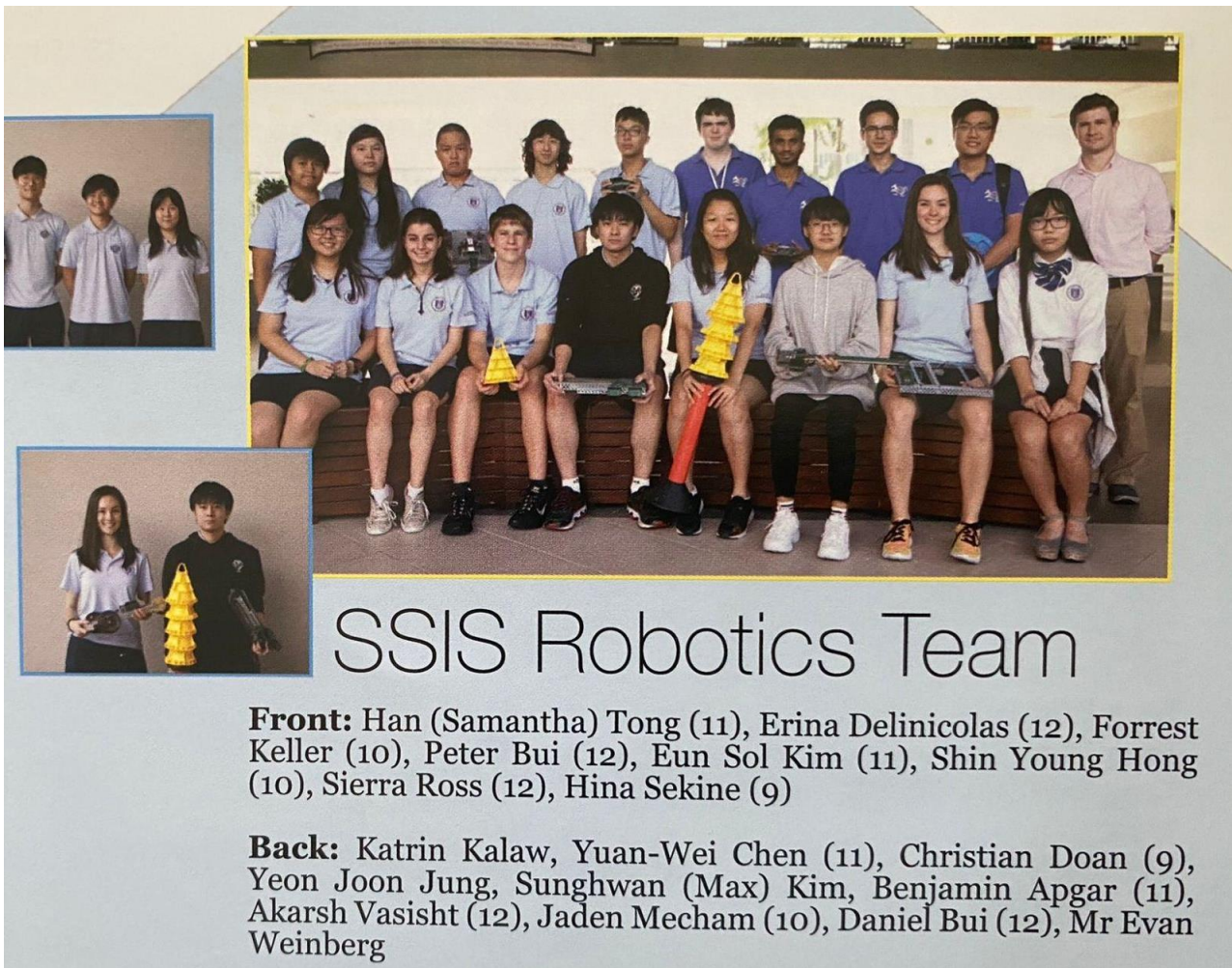
Team 76209B: Rank 13, team 76209G: Rank 20

Here are Max coding, Jayden building and the girls providing the finishing touch:



## 1.2 A solid group

In the yearbook all the members were documented - quite a large group! 17 students from grade 9 to 12 took part this year. What a great and successful start!



### 1.3 VEX World in Louisville, Kentucky

The students were so excited that they convinced their coach to organize a [trip to VEX Worlds!](#). Team 76209G went there on April 25th to 28th. One group picture at the University of Louisville Speed School of Engineering: Hina, Max, Forrest (hidden), Jayden and Joon:



And they won the Inspire award for bringing VEX to Vietnam:



Saigoneer wrote a story about it: <https://saigoneer.com/sponsored-listings/13554-robotics-inspires-students-to-aim-high-at-ssis>

## 2. Season 2018-2019 - Turning Point

This year with a proper travel box for the 18 inch robots team X first visited Formosa/Taipei for the Asian competition and then summer 2019 Vex World, again in Louisville, Kentucky.

### 2.1 Trip to Taipei on Formosa

Second international trip in Asia. Team X represented Vietnam in Taiwan in the first week of December on the 1st of December, 2018. Here is an [Overview Video](#).



From left: Monika Richardson, Tung Hoang, Forrest Keller, Jayden Mecham, Max Kim, Evan Weinberg. Front: Son Nguyen, Daeun Ann Chang, Hina Sekine, Shayan Sinha

Some design decisions are documented on instagram: <https://www.instagram.com/p/BtVVH88BQVb/>





Another picture from yearbook No 22:



**Front:** Ben Lam Jaden Mecham, Kamille Thai, Forrest Keller  
**Middle :** Kampei Omichi, Shayan Sinha, Son Nguyen, Tung Hoang, Hina Sekine, Ann Chang  
**Back :** Mr. Evan Weinberg, Chris Luu, QA Le, Jihwan Kim, Se-jin Kim, Max Kim, Yeon Joon Jung, Gabriel Thai, Ms. Monika Richardson

## 2.2 VEX World in Louisville, Kentucky

This time team 76209X took part in the competition. Mr Weinberg created an [Overview Video](#)



Forrest, Son, Max, Jayden, Hina, Kamille

## 2.3 A farewell to seniors on June 4th, 2019

From Instagram <https://www.instagram.com/p/BySmJgZhg57/>

With exams all done and the year coming to a close, we have to say goodbye to all our seniors. We wish the best of luck to Max, Wei, and Joon in university!! Here is a brief history of each of the seniors:

**Max** - One of the founding members of SSIS Robotics. He was on 76209B for most of In The Zone and moved to 76209G for worlds. He was once again on 76209G for Turning Point. Max was an extremely good coder, putting together a library of functions to use on all robots. He has greatly increased the coding capabilities of our team.

**Wei** - Also one of the founding members of SSIS Robotics. She was a coder on 76209G for the entirety of In The Zone. Unfortunately due to other academic obligations, she was unable to participate as much during Turning Point. But she still came in when she could to help out both 76209G and X with coding.

**Joon** - Again one of the founding members of SSIS Robotics. He was on 76209B for most of In The Zone before moving to 76209G for worlds. This year, one of the things he has done is create a website for VEX Vietnam. He has also hosted open houses informing other schools about VEX Robotics. With his help, we will be able to host the very first VEX Vietnam national tournament. He has also helped out both 76209G and X this year wherever he could.

Once again, a huge thank you to all our seniors for their contributions and we wish them good luck in the future !



### 3. Season 2019-2020 - Tower Takeover

In full swing now two teams visited Taipei at the end of 2019, team X and G. In January 2020 the first Vietnamese Tournament was held at SSIS with 4 other schools visiting. The summer event Vex World was unfortunately canceled due to Covid-19. A virtual world rank of 91 was assigned by combining the previous achievements.

The experienced teams X and G with 5 team members each were joined by two rookie teams. Team G started early in May to design the competing robot - as documented in [the Engineering Notebook](#).

- **Team 1** with 9 members: (9) Justin Chow, Hoang (Danny) Nguyen, Mayank Verma, Yoo-Bin Kim, (10) Hyeonjin Choi, Khoa Ngo, Peng (Gavin) Zhang, (11) Daeun (Ann) Chang, (12) Jihwan Kim
- **Team 2** with 8 members: (9) Vanaak Lak, Yuan-Chih (Daniel) Lin, Phuc Nguyen, (10) Hoang (Leo) Nguyen, Tri Gian, (11) Vu (Evan) Pham, Merlissa (Lissa) Adona, Sean Chua
- **76209X** with 5 members: (10) Shayan Sinha, (11) Son Nguyen, Hina Sekine, (12) Forrest Keller, Vo Nguyen
- **76209G** with 5 members: (10) Tin Nguyen, (11) Tung Hoang, (12) Jaden Mecham, SeJin Kim, Kamille Thai

#### 3.1 Taipei/Formosa

Team X and G went there for the first weekend of December and participated on December 7th.

[Video Overview](#)



## 3.2 First Vietnamese Tournament 2020

January 18th, 2020 marks the first Vietnamese National Championship in Vietnam.



From [Instagram](#): Incredible weekend for the SSIS robotics teams!

This past Saturday, SSIS hosted the first ever VEX robotics tournament in Vietnam. 3 teams from SSIS participated with other teams from ISHCMC, ISHCMC AA, and Concordia Hanoi. At the end of qualifications, the SSIS teams filled out the 3 top spots. **76209G** placed 1st at the end of qualifications with a record of 6-2-0. Our rookie team, **76209S** placed 2nd with a record of 6-2-0 and went undefeated for a pretty crazy string of matches. **76209X** placed 3rd with a record of 5-2-1, just nudging 61142B into 4th. G formed the 1st seed alliance with 61142B, S the 2nd seed with 10383A, and X the 3rd seed with 61142A. G and X met in finals where G came out on top in the best of 3.

G was also awarded the excellence award to qualify for worlds! It was so much fun to see this tournament finally being held and we can't wait to see VEX robotics expand in Vietnam!



### 76209G SSIS Dragons G

Rank: 1	WP: 12	AP: 42	SP: 61
6-2-0	OPR: 10.0	DPR: 3.4	CCWM: 6.6

### 76209S SSIS Dragons S

Rank: 2	WP: 12	AP: 36	SP: 59
6-2-0	OPR: 3.6	DPR: 4.6	CCWM: -1.0

### 76209X SSIS Dragons X

Rank: 3	WP: 11	AP: 33	SP: 78
5-2-1	OPR: 9.7	DPR: 3.1	CCWM: 6.7

### 61142B CISH Team B

Rank: 4	WP: 11	AP: 21	SP: 81
5-2-1	OPR: 10.8	DPR: 6.2	CCWM: 4.5

### 89206A ISHCMC1

More on the tournament [here](#). The participating SSIS teams were:

- **76209X** - Forrest Keller, Khanh Nguyen, Hina Sekine, Daeun (Ann) Chang, Son Nguyen, Shayan Sinha, Nguyen Vo
- **76209G** - Jaden Mecham, Se Jin Kim, Tung Hoang, Tin Nguyen, Kamille Thai
- **76209S** - Khoa Ngo, Yoo-Bin Kim, Peng (Gavin) Zhang, Hyeonjin Choi, Hoang (Danny) Nguyen, Justin Chow



76209S - Gavin Zhang



76209X - Hina Sekine



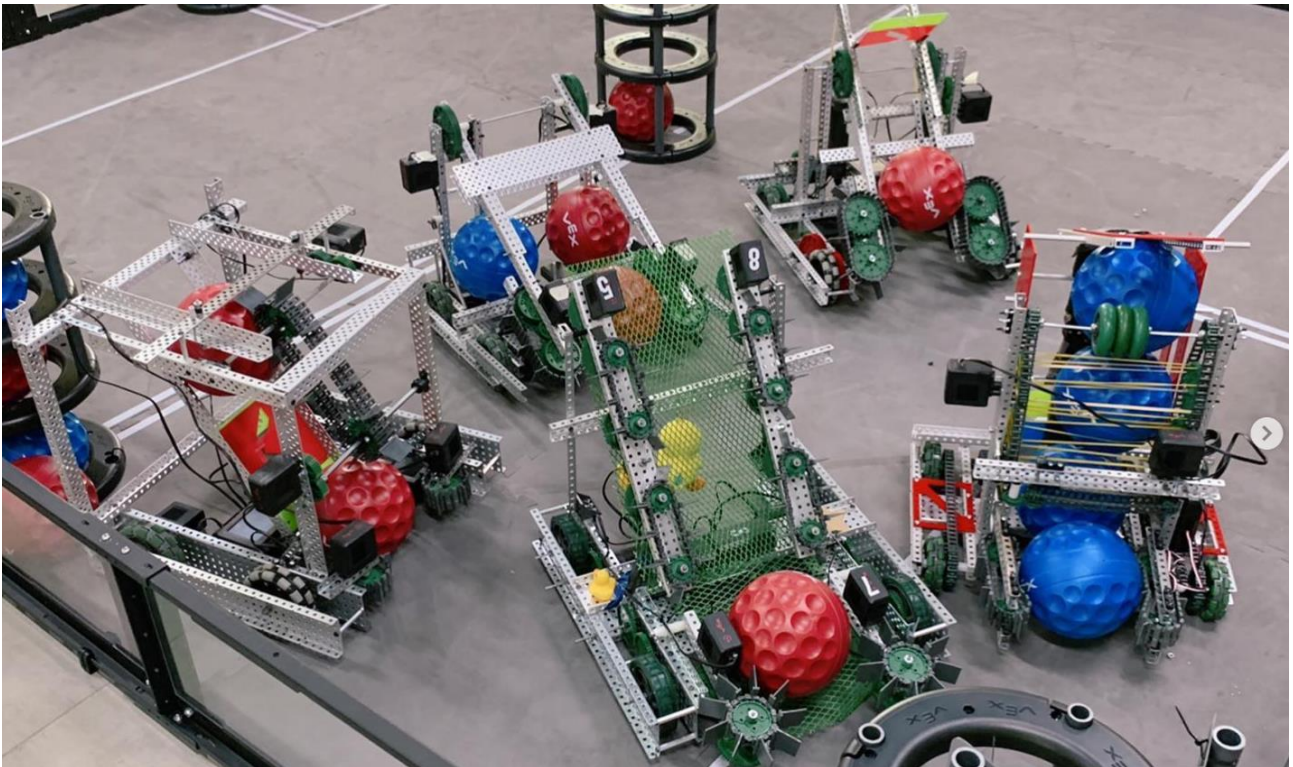
76209G - Jaden Mecham

### 3.3 VEX World in Louisville, Kentucky

Originally scheduled for Summer 2020 - **Canceled due to Covid-19**

### 3.4 Summer school at SSIS with the Robotics Club

The students finished **5 individual robots** after **one week of summer school** with Mentor Evan Weinberg: <https://www.instagram.com/p/CBnS-0HBDM8/>



One impact was that students wanted to organize a summer school themselves as teachers with students from [Poussieres de Vie](#) in Summer 2021.



This was an eventful week in the summer - with 5 finished robots at the end of it!



Nice and steady. After placing in the top three in the qualifications round, Khoa Nga (10) adjusts to the robot's claw before the start of the next round. Khoa was a part of the rookie team which placed second in qualifying round, but were eliminated in the semi-finals. -photo by Brooke Hoang

Stack, stack, stack. Placing the blocks in the designated areas, Lily Tran (12), a volunteer, prepares the arena for the next robot battle. "There was a lot of time, so it was quite challenging. Thankfully, my friends were there and we ended up having lots of fun," Lily said. -photo by Brooke Hoang

Teaching experience. Explaining the mechanics of the robot at VEX, Forrest Keller (12) familiarizes guests and students from other schools with the competition. "Most of the other teams were new to VEX and it was great to be able to talk to them about it, and help them understand how the competitions work. This was the first time we were the ones teaching people about VEX. It was exciting to be a part of growing other school's programs." -photo by Brooke Hoang

## The BATTLE of the Bots

All SSIS teams placed in the top three for qualifications in the first VEX national tournament in Vietnam. Being the driver on the team, Jaden Mecham (12) controls the robot to put the cube in the designated area while his teammates are clapping and cheering him on.

On January 18, 2020, Saigon South International School hosted the first-ever VEX challenge in Vietnam. There were eight teams from four different international schools including: International School of Ho Chi Minh City, International School of Ho Chi Minh City American Academy, Concordia International School Hanoi and Saigon South International School. These schools competed for a chance to attend the largest robotics competition in the world, held in Louisville, Kentucky in April 2020.

Prior to the competition, the SSIS robotics spent months trying to find the correct materials and products to build the robot. "First, we make sure to carefully design a robot that we feel can complete the task at hand. Then, we build this robot. Jaden. While all of this was happening, the Dragons robotics team had to code for the robots and constantly readjust their plans to stay on schedule." -by Brooke Hoang

Star player. Robot 76209G was one out of three teams that represented the Dragons. Its complex mechanics such as the built-in conveyor belt help transport the cubes into the goals, which was the main objective of the competition. -photo by Brooke Hoang

Mini-Tweaking. Preparing for the next match, Gavin Zhang and Khoa Nga (10) fix up their robot. In the elimination rounds, teams from different schools form alliances to battle other groups in block-stacking competitions. -photo by Brooke Hoang

Battle of the bots. As Gavin Zhang (10) and Khoa Nga (10) watch, Danny Nguyen (9) controls the robot to grab and place a block in the correct place. SSIS Team G and CSH Team B won in two out of three rounds against SSIS Team X and CSH Team A in the finals with scores of 11-15, 26-17, and 18-0. -photo by Brooke Hoang

No group yearbook #23 photo (Covid-19) but an article of the first Vietnamese National Championship at SSIS on January 18th, 2020.

## 4. Season 2020-2021 - Change-Up

With the Coronavirus situation relatively well under control in Vietnam, the second national championship was held in January 2021. Again several other schools visited, and LSTS turned out to be the champion. From SSIS three teams competed: G, S and X

Not anticipating the effects of the pandemic the SSIS Robotics program expanded. In September the members were given a choice **VEX** or **FRC**:



[https://www.instagram.com/ssisrobotic\\_frc/](https://www.instagram.com/ssisrobotic_frc/) (2 posts)

Teams and Mentors were better organized:

Rookie 1	Rookie 2	Varsity 1	Varsity 2	Varsity 3
Sally Luu	Khai Phung	Hina Sekine	Son Nguyen	Tung Hoang
Vu Hoang Nam	Dao Tran	Gavin Zhang	Yenny	Sean Chua
Tiga Chang	John Huynh	Hyeonjin Choi	Bao Dao Gia	Reslie Lu
Steven Teng	Jinwoo Park	Nam Luu	Tin Nguyen	Khoa Ngo
Khang Nguyen	Daniel Chen		Shayan Sinha	

Even for different days some mentors were dedicated. Unfortunately in their senior year one year later they no longer supported the club:

Monday Mentors!		
	Monday	Thursday
Rookie 1	Reslie Lu	Tin Nguyen
Rookie 2	Bao Dao Gia	Nam Luu

And then there are 3 varsity teams:



Top left:  
Hina with Gavin, Hyeonjin and Nam

Top right:  
Reslie with Khoa and Tung

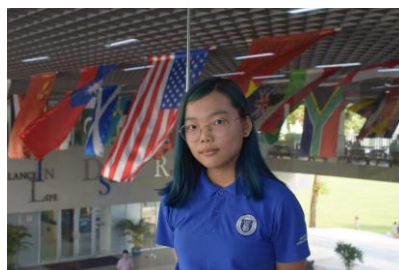
Left:  
Son with Yenny, Bao and Tin

## 4.1 Second Vietnamese National Championship 2021

Team G, S and X from SSIS competed on January 23rd, 2021. Here are the leaders of the teams:



76209S - Gavin Zhang



76209X - Hina Sekine



76209G - Jaden Mecham

For team SSIS there were 4 participating teams: G, X, S and M:

- 76209G - Sean Chua, Tung Hoang, Khoa Ngo, Reslie Lu
- 76209X - Hyeonjin Choi, Nam Luu, Son Nguyen, Gavin Zhang
- 76209G - Dao Tran, Daniel Chen, Bao Dao Gia, Khai Phung, Jinwoo Park
- 76209M - Khang Pham, Tiga Chang, Sally Luu, Khang Nguyen

Luke Dyer posted a video from the match: [https://www.instagram.com/p/CKX\\_vxeh\\_Sz/](https://www.instagram.com/p/CKX_vxeh_Sz/)

<https://www.robotevents.com/robot-competitions/vex-robotics-competition/RE-VRC-20-2828.html#general-info> has the results of this event.



## 4.2 Formosa Taipei

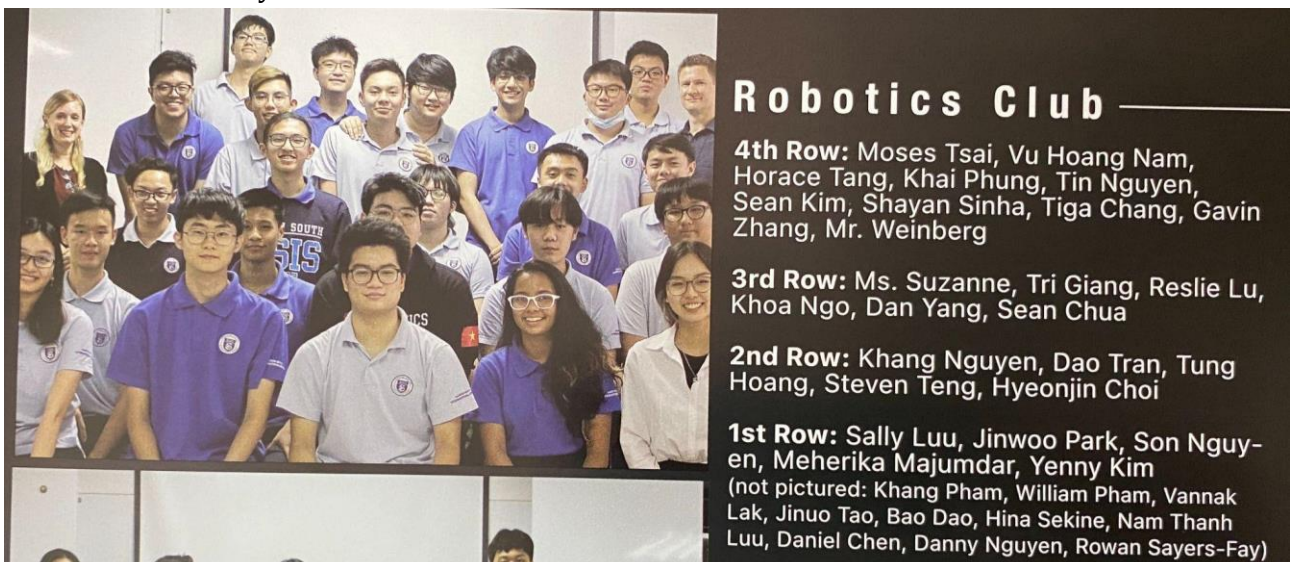
Canceled due to Covid-19, was scheduled for the first week of December 2020

## 4.3 VEX World at VEX Headquarters

Only virtual due to Covid-19, but a strong team at SSIS on February 27th, 2021:



The robotics club in yearbook #24:



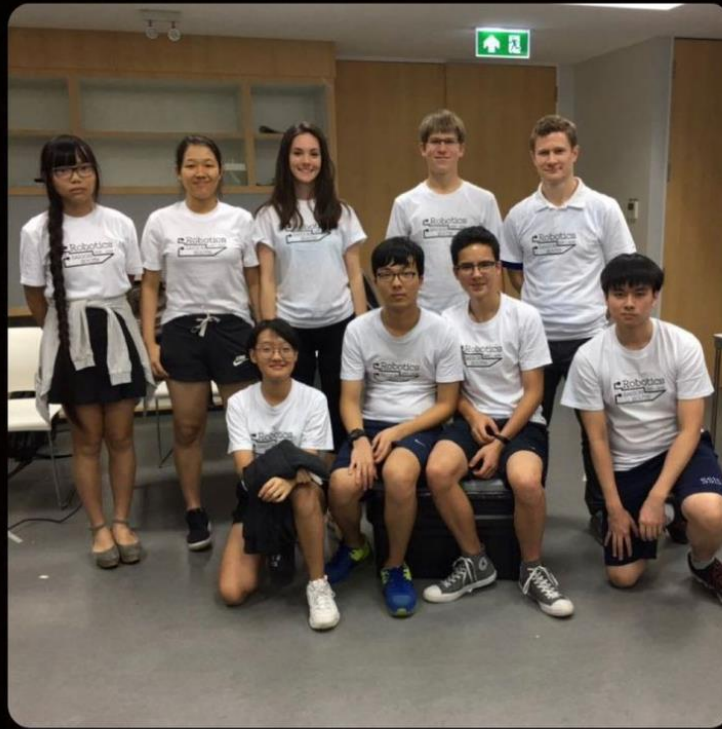
## 4.4 Planned Summer School 2021

The outbreak of Covid-19 in Saigon led to a lockdown of the city. The [planned summer school](#) led by students from a year ago was postponed to next school year.

## 4.5 History 2016 - 2021 by Hina on [Instagram](#)

As a farewell gift Hina compiled a history of VEX for Instagram, [check it out here](#).  
<https://www.instagram.com/stories/highlights/17937337657445584/>

### HISTORY OF @VEXROBOTICS AT @SAIGONSOUTHINTERNATIONALSCHOOL !



2017 MAY



VEX Robotics in Vietnam started with a 2-week building session at SSIS for middle school & high school students. It ended with a mini robotics tournament!



All 4 teams built and programmed working robots by the end of the 2 weeks!



2017 Building



SSIS was the first in Vietnam to have a VEX robotics team!

We had 2 teams, the girls' team and the boys' team. Each team designed, built, tested, and redesigned the robot for the In The Zone game!

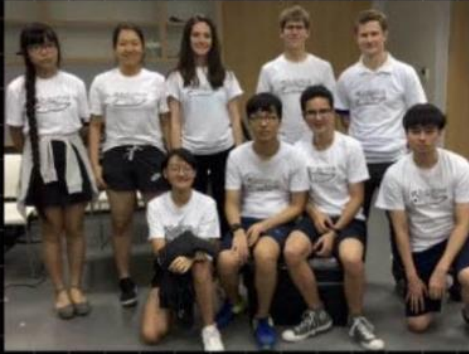


Mr. Weinberg was our coach, and he assisted us occasionally in our process.

Despite being an Apple school, we had to code our robots on Windows computers.



## 2017 FEBRUARY



In February of 2018, we went to our first ever VEX robotics tournament at NIST in Bangkok!

The image to our right is how we transported our robots. We never passed through security without the box being opened.



Our teams were 76209G (girls) and 76209B (boys)!

76209G ended in semi-finals and 76209B in quarter-finals!



## 2018 APRIL



SSIS got invited to VEX Worlds 2018 to represent Vietnam! Mr. Weinberg initially considered declining for another event, but the students convinced him otherwise.

To reduce costs, we stayed in an Airbnb and ate 6 ingredients for food.



We got the inspire award for our division and got to walk for Vietnam in the parade!



## 2018 Building



Time for our 2nd year of robotics at SSIS!

For the Turning Point season, we got our IDEA Center for STEM activities!



## 2018 SEPTEMBER



To spread VEX robotics to other schools, we had our first scrimmage & presentation! We also invited LSTs to come build robots with us!



## 2018 DECEMBER



Our first competition of Turning Point was Formosa Nationals 2018 at TAS, Taipei!

This was the first competition where we had a competitive robot!



We lucked out as we got the V5 kits before many other teams.

Hina made the shirts 1 day before we flew out to Taiwan :D



2019 APRIL



We went to our 2nd VEX Worlds tournament!

Kamille & Hina went to the Girl Powered event and ended up matching with the color scheme!



This time around, we had matching shirts & sweaters, walkie talkies, and robot boxes like all the veteran teams!



2019 Building



In our 3rd year of VEX robotics at SSIS for the Tower Takeover game, we made rookie & veteran teams to train new members better!



## 2019 NOVEMBER



We had another scrimmage to spread VEX robotics to other schools and build robots!



SSIS got to act as experts this time, assisting other teams in code, parts, and designs!



At the end, we had a mini game with Concordia & ISHCMC!

## 2019 DECEMBER



We went to our 2nd TAS Formosa competition!



76209X, 762096 robots went, and the least people per team went, so we were all busy scouting, programming, and building.



76209X ended up in 9th place overall, and we got to meet old friends from the past year!



## 2020 JANUARY



SSIS hosted the first ever Vietnam Nationals tournament in 2020!

We had 2 veteran teams & 3 rookie teams compete, and we scored top 3!



We got to see teams from the scrimmage compete with us.

SSIS ended up qualifying for Worlds 2020!



## 2020 JUNE



Because COVID cancelled most ASAs for 2020, Mr. Weinberg & some veteran members hosted a 5-day summer program!



We went from no field, no robots to 5 working robots & a game for the Change Up game!





## 2020 AUGUST



We had our first elections for the program leaders for VEX & FRC!

Hina and Vannak were elected for VEX and FRC, respectively!



## 2020 AUGUST



SSIS Robotics Club presented in the 2020 club expo!

We had students drive the robots we made in the summer to interest them!



## 2020 Building



Now in our 4th year of VEX robotics at SSIS, we welcomed the most members we ever had with precautions for COVID!



This year, we made a rookie mentoring system so veteran teams could build efficiently and rookie teams could learn from older members!



## Extras!



Even at SSIS, girls are under-represented in robotics. Here are the girls who have taken a large part in VEX: Eun Sol, Sierra, Kamilie, Sally, Ann, Hina, and Yookin.



The VEX team photos through the years!  
top left: 2018, Thailand!  
top right: 2019, IDEA Center!  
bottom left: 2020, IDEA Center!

## CREDIT:

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  - ★ Saigon South International School

## 5. Season 2021-2022 - Tipping Point

### 5.1 Virtual start of the year - September 27

The outbreak of the Corona virus in Vietnam in May 2021 led to several extended lockdowns in the country and the first ever virtual start of school. While some restrictions slowly ceased in October 2021, the vaccination of students and their return to school took until 2022. The building part of the robots therefore started only in the second semester. The Vietnam Tournament was canceled, and although the field elements and other parts were shipped, the SSIS teams were not participating in the region nor in the world championship.

Starting the year virtually, more than 30 students joined the club and attended the Zoom meetings. First challenge: program your robot to gain as many points as possible in 60 seconds. Instructions from September 27th in [this slideshow](#). For this year the [First Robotics Competition](#) is canceled.

There were 7 virtual meetings in 2021:

- [27 September - Day 1](#)
- [4 October - No Robot Left Behind](#)
- [11 October - It's On!](#)
- [26 October - Doing Our Best](#)
- [1 November - Teaming Up](#)
- [8 November - Making Plans](#)
- [15 November - Finishing Strong](#)

Further we had 2 virtual meetings in 2022:

- [28 February - Building the Field](#)
- [10 March - Field Final and Robot Hacking](#)

By November 8th, 2021, the elements to build the new game “Tipping Point” had arrived at the school and teams worldwide were building their robots and starting to compete. Time for SSIS to [plan their robots and reflect](#) on the designs of other teams.

### 5.2 Competition in the Virtual Programming - April 18

In April it was finally possible to submit the results of the virtual competition to Vex. With 130 points SSIS was in the middle of Vietnam, between Concordia Hanoi with 104 and 170 points, and behind LSTS with 200 points. Right after the announcement on April 18th Phu went on the programming challenge and put us SSIS in first place in Vietnam with 237 points - and place 12 worldwide!

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region
16	230	7	87923A	LSTS	Lawrence S.Ting School	Vietnam
42	170	0	61142A	CISH Team A	Concordia International School Hanoi	Vietnam
57	132	30	76209X	SSIS Dragons X	Saigon South International School	Vietnam
59	131	0	61142B	CISH Team B	Concordia International School Hanoi	Vietnam

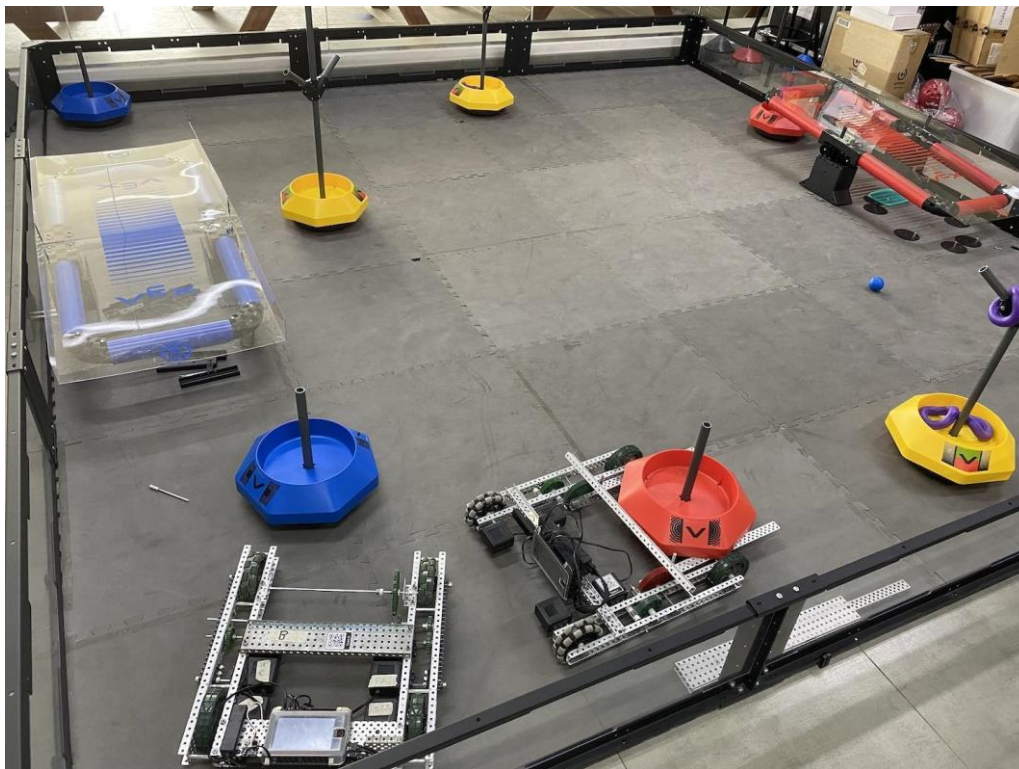
<https://www.robotevents.com/robot-competitions/vex-robotics-competition/virtualSkillsStandings>

It didn't last long:

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region
2	303	0	87923A	LSTS	Lawrence S.Ting School	Vietnam
14	237	1	76209X	SSIS Dragons X	Saigon South International School	Vietnam
45	170	0	61142A	CISH Team A	Concordia International School Hanoi	Vietnam
62	131	0	61142B	CISH Team B	Concordia International School Hanoi	Vietnam

### 5.3 Return to physical school - April 4

With slowly lifting government regulations more and more students were vaccinated and returned to SSIS. With a first stage on February 28th we started to [build the field](#). With the number of students the teams for Monday and Thursday were divided. But with growing interest initially team B decided to join both days from April 4th on. By the end of April there were 5 teams with at least some members joining for more than one day!



### 5.4 Robot building - April 29

Several robots were in driving condition in April 2022, but not designed for the competition of this year. The first team to have a [functioning mogo lift](#) mechanism was team C on April 29th.

## 5.5 New leadership team - May 12

On May 12th five candidates presented themselves for the roles of the two Co-Leaders for the coming season. The candidates were:

- Meherika Majumdar
- Phu Le Vinh
- Nguyen Dac Khang
- Nguyen Nhat Han
- My (Milly) Nguyen
- Quynh-Anh (Tina) Nguyen

After the public vote **Phu** and **Meherika** were selected to lead the VEX robotics team.

## 5.6 Visitors from BIS, ISHCMC and LSTS - May 19

While students from other schools are still not allowed to enter the campus, with special cases teachers are allowed. So we invited the coaches from 3 other schools to SSIS to catch up on the progress of VEX on May 19th at 3:00 PM. This is the agenda and topics of the meeting.

- BIS: David Knagg, Colin Astbury
- ISHCMC AA Thomas Zehmeister

Main outcomes:

- Scrimmage on October 8th, possibly SSIS, in the gym with 2 fields and place/time to build.
- Formosa on December 2nd and 3rd (if travel is possible)

## 5.7 First inhouse Competition - June 3

On June 3rd we finally got the 4 remotely controlled robots ready to compete in a tournament. We also had finalized the names of the 6 teams with their respective leaders:

- |                   |            |        |
|-------------------|------------|--------|
| ▪ S (A) - Daniel  | seniors    | purple |
| ▪ X (B) - Khang   | x-men      | blue   |
| ▪ G (C) - Tina    | girls rule | red    |
| ▪ D (D) - Doyun   | dragons    | orange |
| ▪ M (E) - Vanessa | masters    | yellow |
| ▪ R (F) - Ian     | rookies    | green  |

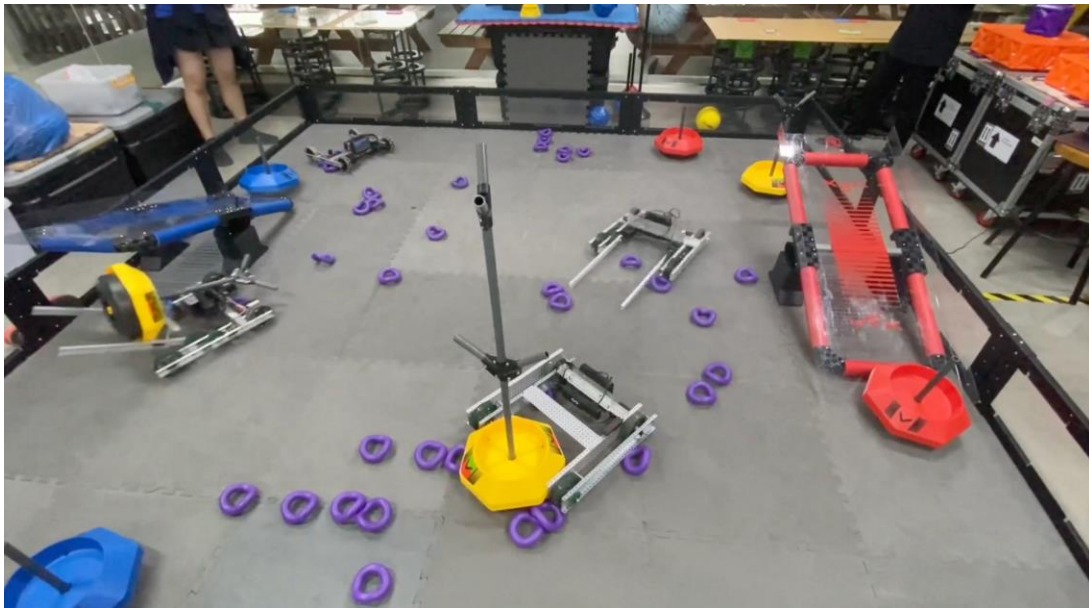
This match was between the red and blue alliances:

The participating teams X, G, D and M will compete in alliances:

auton.	RED Alliance		result	Blue Alliance		auton.
0	76209X	76209M	90 - 40	76209G	76209D	0
0	76209D	76209X	40 - 150	76209M	76209G	5
0	76209G	76209X	60 - 40	76209M	76209D	0

Teams with their driver get 100 base points. The winner of the 15 seconds autonomous period get additionally 5 points.

We have a [video on Youtube](#) from the second match. The blue alliance scored 150 points!



There are 100 base points if the team shows up for the competition.  
 Winning the autonomous game gives 5 points. The final scores:

76209G	100	40/150/60	5	=	355	Driven by Tina
76209X	100	90/40/60	0	=	290	Driven by Khang
76209M	90	150/40	5	=	285	Driven by Hawoon
76209D	40	40/40	0	=	120	Driven Milly

## 5.8 End of the Season

During exam week many students joined together in the IDEA center and disassembled all robots. Then they started to tear the robots apart. And we had a [final group picture](#):



Not all members are in the picture, and with limited time to finish the yearbook #25 we are included as a list of the 37 members and a short story by Mr. Larson:

## SSIS Robotics

Advisor: Evan Weinberg/wMatthias Kreier

President: Shayan Sinha

Alex Pham  
Anh Minh Pham  
Cheuk Kai Chan  
Daniel Chen  
Danny Nguyen  
David Vo  
Gavin Zhang  
Hansana Bandara  
Han Nguyen  
Hyeonjin Choi  
Ian Ngo  
Jay Choi  
Jerry Tran  
Jihun Kim  
Jiwon Yoon  
Junhang Lee  
kenneth Wang  
Keng lam  
Khang Nguyen  
Khoa Ngo,  
Lam Nguyen,  
Leo Nguyen  
Lindsey Lee  
Meherika Majumdar  
Mia Chau  
Phu Le  
Quang Tran  
Rosie Lee  
Shawn Nguyen  
Steven Teng  
Tesla Nguyen  
Tiga Chang  
Tina Nguyen  
Tri Giang  
Vannak Lak  
Vanessa Lam  
Yuseong Han



**Kickin it!** Ensuring that his students are embarking on the best ways to build the best robots, **Evan Weinberg** as the supervisor of the Robotics club aids the students to grasp a better understanding of the playground and use tactical maneuvers. Since the club aims to build a single best robot, the students are splitted into small groups tasked with the most challenging goal, code and build a robot that attains the most points in the playground.

-Photo by Nathan Larson

## 6. Season 2022-2023 - Spin Up

At the end of season 2021-2022 we planned to meet during the last week of July to kickstart the new season. With Mr. Dat still at the school this would have been easily supervised. Unfortunately the ordered game materials for the new season did not arrive, so we postponed the early start.

### 6.1 Kickstart the new season - August 10

On Wednesday, August 10th, the leadership team met for the first time to organize the new season. Some slideshows [Guidelines 2022-2023](#) were reviewed on Thursday 11th and Monday 15th with a core team of 5 students to present our agenda for the first meeting on August 18th with the returning senior club members.



The first meeting with 8 students happened on August 18th, 2022. Key agreements for the start:

- No material stored in the tool boxes
- Tools and materials returned, reserve time for cleanup
- Power cable and USB cable are fixed to the brain and never removed
- Dedicated spot for battery with clips to ensure safe handling
- Wires are fixed with zip-ties to the frame

Possible Drive drivetrains:

- Tank Drive (team D)
- X-Drive (team X)
- Mecanum Drive (team G)





During the 3 coming sessions on August 18th, 23rd (Monday 22nd is early release) and 25th we built 3 robot bases.

They were presented at the club fair Friday August 26th:



VEX club here left corner ;)

## 6.2 New Teams with their respective leaders - early September

First real meeting on August 29th, and the result from the signup is ...

Next, September 5th and 8th and 12th and 15th

After the signup the new team leaders are ...

More updates on the website:

<https://sites.google.com/ssis.edu.vn/vex>

Overall Spin Up overview:

<https://sites.google.com/ssis.edu.vn/vex/history/2022-2023-spin-up>

Scrimmage November 5th, 2022:

<https://sites.google.com/ssis.edu.vn/vex/history/scrimmage-2022-at-ssis>

Nationals in February 11th, 2023: <https://sites.google.com/ssis.edu.vn/vex/nationals/2022-2023-spin-up>

<p style="text-align: center;"><b>76209 G</b> <b>Honey Badgers</b></p> <p>Leader: <b>Tina</b> Members: Meherika, Milly, Travis, Mary, Bao-Anh, Bomin Team name: <b>Honey Badgers</b> Robot name: <b>Winnie Poo</b></p>	<p style="text-align: center;"><b>76209 X</b> <b>Eggs</b></p> <p>Leader: <b>Khang</b> Members: Phu, Kenneth, Leo, Hawoon, Daniel, Thai, Alex Team name: <b>Eggs</b> Robot name: <b>Quantum Gravity</b></p>	<p style="text-align: center;"><b>76209 D</b> <b>Kangaroos</b></p> <p>Leader: <b>Doyun</b> Members: Yuseong, Bella, Minh, Justin, Dipper, Jack Lin, Benjamin, Dongjae Team name: <b>Kangaroos</b> Robot name: <b>Unlimited Power</b></p>	<p style="text-align: center;"><b>76209 R</b> <b>Rookies</b></p> <p>Leader: <b>Wayne</b> Members: Quang, Bao Nhi, Aaron, Albert, Tesla, Phu Lam, Jack T, Jack W, Phu Lam, Hoang Team name: <b>Racoons</b> Robot name: <b>GruMobile</b></p>
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And starting November 17th we again have a **Middle School** team **76209M**. They are already listed on [robotevents.com](http://robotevents.com), and will start to build their own robot in December (after the week without walls). First member: Duy (Alex). He is doing a good job [documenting his team work on github](#), later MinSeo is taking care of it in the digital notebook.

<https://www.instagram.com/ssisrobotics/>

Team Thursday - 30 students:



Thanh-Danh Benjamin Bui, Po-Yen (Daniel) Chen, Phan Viet Anh Do, Wayne Jen Goh, Jing-Xiang (Albert) Huang, Hawoon Jung, Doyun Kim, Minchan (Leo) Kim, Bomin Kwon, Aaron Law, Phu Le, Thai Le, Dongjae Lee, Hyunseung Lee, Jiahui (Jack) Lin, Meherika Majumdar, Dac-Khang Nguyen, Hoang Nguyen, My (Milly) Nguyen, Nam Nguyen, Quynh-Anh (Tina) Nguyen, Han (Bella) Ong, Dinh (Mary) Pham, Khoi (Justin) Pham, Minh Pham, Thai (Travis) Pham, Toan (Alex) Pham, Bao Nhi Thai, Mikel Aidan Torres, Tin Truong, Jack Weisblatt, Jiwon Yoon, Junhang Lee

And on Monday there are 15 students:



Wayne Jen Goh, Phu Lam, Phu Le, Jiahui (Jack) Lin, Bao-Anh Nguyen, Dac-Khang Nguyen, Khanh (Tesla) Nguyen, Quynh-Anh (Tina) Nguyen, Thai (Travis) Pham, Toan (Alex) Pham, Hoang Tran, Vu (Jack) Trinh, Jack Weisblatt, Minchan (Leo) Kim

In time the teams were updated:

<b>76209 G</b> <b>Honey Badgers</b>	<b>76209 X</b> <b>Eggs</b>	<b>76209 D</b> <b>Kangaroos</b>	<b>76209 R</b> <b>Raccoons</b>
Leader: <b>Tina</b> Members: Meherika, Milly, Travis, Mary, Bao-Anh, Bomin  Team name: <b>Honey Badgers</b>  Robot name: <b>Natasha</b>	Leader: <b>Khang</b> Members: Phu, Kenneth, Leo, Hawoon, Daniel, Thai, Alex  Team name: <b>Eggs</b>  Robot name: <b>Omelette</b>	Leader: <b>Doyun</b> Members: Yuseong, Bella, Minh, Justin, Dipper, Jack Lin, Benjamin, Dongjae  Team name: <b>Kangaroos</b>  Robot name: <b>Dog</b>	Leader: <b>Wayne</b> Members: Quang, Bao Nhi, Aaron, Albert, Tesla, Phu Lam, Jack T, Jack W, Phu Lam, Hoang  Team name: <b>Raccoons</b>  Robot name: <b>GruMobile</b>

Plus **76209M - Mission Impossible** with robot **Ethan Hunt**.

The individual websites are:

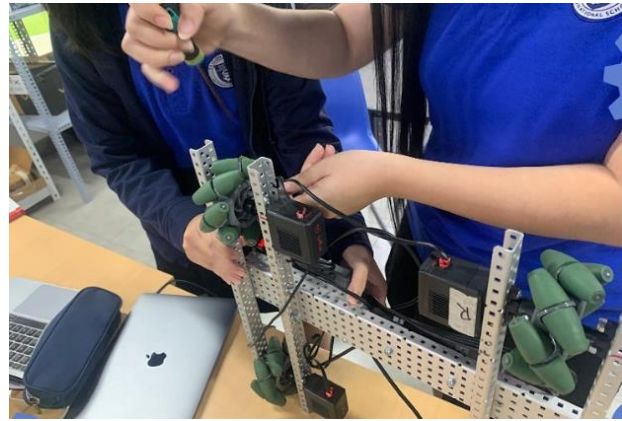
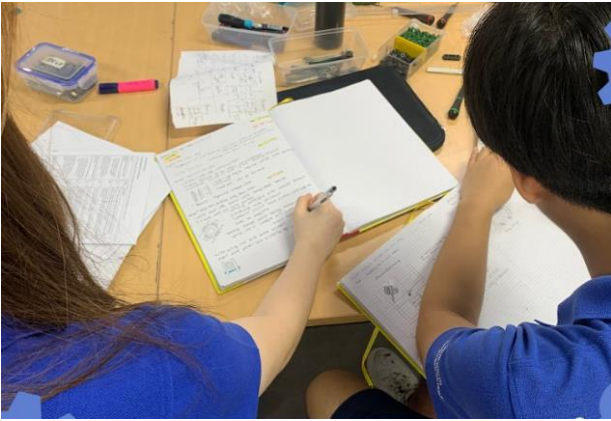
<a href="#"><u>76209S</u></a>	<a href="#"><u>76209D</u></a>	<a href="#"><u>76209X</u></a>	<a href="#"><u>76209M</u></a>	<a href="#"><u>76209G</u></a>	<a href="#"><u>76209R</u></a>
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### 6.3 Welcome new team members - September 15th

We have 15 students on Monday and 30 students on Thursday building robots and documenting their work in the engineering notebook:

<https://www.instagram.com/p/CilixmyvGKi/> and <https://www.instagram.com/p/CilikDwPDmY/>





#### 6.4 Field is built and ready for disc-shooting robots - September 22nd



And a timelapse of the work: <https://www.instagram.com/p/Ci2bJAwIm5b/>

And the Racoons (or Minions) from team 76209R got their GruMobile running!  
<https://www.instagram.com/p/CikoZFJIpDo/> Plus: Mecanum drive is now strafing.

## 6.5 Progress in preparation for the Scrimmage

### 6.5.1 Virtual skills - October 7th, 2022

After a great 12th place worldwide in season 2021-2022 we started to have all teams competing in the virtual skills. It is a work in progress, but there is sufficient time left - and a lot of room to learn. All 5 teams improve slowly on [their programming skills](#).

Standings October 7th, 2022:

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region	Country / Region
79	76	33	76209X	SSIS Dragons X	Saigon South International School	Vietnam	Vietnam
99	36	0	76209D	SSIS Dragons D	Saigon South International School	Vietnam	Vietnam
102	27	44	76209S	SSIS Dragons S	Saigon South International School	Vietnam	Vietnam
111	21	49	76209R	Saigon Racoons	Saigon South International School	Vietnam	Vietnam
134	6	20	76209G	SSIS Dragons G	Saigon South International School	Vietnam	Vietnam

### 6.5.2 First disk shooting - October 24th

It was not a robot, but **Team R** finished a shooting mechanism. By the end of October no robot had a shooting mechanism implemented. Only 2 teams can at least drive.

Two days later (October 26th, 2023) we got our VEX order from October 3rd (original order was from June 13th). Finally some flex wheels for the shooter! We got 2 weeks left, no shooter, no pickup mechanism on a robot yet, and only 2 driving robots. There will be **some overtime** in the next few days!



This overtime indeed happened: See [6.7.4 One week earlier](#) and [6.7.1 The Friday before the match - November 4th](#).

## 6.6 Visit of Poussieres de Vie and Citrus Circuits - October 13th, 2022

Remember the [summer school in 2020](#)? And the [planned summer school in 2021](#)? To reactivate the idea and get new inspiration and connection we were visited by both [Poussières de Vie](#) (with Elizabeth Riley, STEM consultant, Patrick Desir and Antoine Paumard), and [Citrus Circuits](#) (with Kris and Steve Harvey) on October 13th, 2022.

From SSIS involved were Ms. Suz, Daniel Mendes, Lan Pham, Mr. Hung, Mr. Bertoia, Mr. Maramba, Ms Thu. And the Girls Code Club (with Alice Le) and the VEX club (Phu, Milly, Travis, Khang D, Tina, Alex, Wayne, Bao Nhi, Hawoon and Meherika). Ready for the visitors:



And we got a group picture in the IDEA center:



After some introduction conversations 8:00 to 9:30 in the HS with the IDEA center and the current VEX program (and paused FRC program) we went to Middle school:



And further to visit Mr. Maramba in Elementary school after 10:30:





After lunch the Girls Code Club held a Q&A about the CSE field, the tech industry, preparation with colleges, challenges, recommended programs and languages and many more.



The Elementary school maker space was exciting to see. And our HOS visited!



A visit to PdV was planned for December. Yet their students visited us earlier - see them as our guests at the scrimmage on November 5th! And the planning for the summer school 2023 started.

## 6.7 Scrimmage at SSIS - November 5th

More on this dedicated website: [Scrimmage at SSIS 2022](#)



Rank	Team	WP	AP	SP	W-L-T
1	76209X Eggs	1.50	0.00	28.00	3-1-0
2	76209D Kangaroos	1.50	0.00	28.00	3-1-0
3	76209G Honey Badgers	1.00	0.00	28.00	2-2-0
4	76209R Racoons	0.00	0.00	28.00	0-4-0

Match	Team 1	Team 2	Score
Q1	76209G	76209X	61
	76209D	76209R	33
Q2	76209G	76209X	35
	76209R	76209D	49
Q3	76209D	76209X	23
	76209R	76209G	65
Q4	76209D	76209G	63
	76209X	76209R	21

Seed	Team	Seed	Team
1	76209X Eggs Saigon, Vietnam	2	76209D Kangaroos Saigon, Vietnam
	76209G Honey Badgers Saigon, Vietnam		76209R Racoons Saigon, Vietnam

41	44
----	----

Info about the event on [robotevents.com](http://robotevents.com).



### 6.7.1 The Friday before the match - November 4th

Our school's instagram account shared [some pictures about the days of preparation](#). Then on Friday we began to disassemble the main field to move to the gym while still improving the robots:



The tables in the gym arrived a little later, so further development took place on the floor. The main field and team tables were set by 8:00 PM, and it was time to go home. Since we only got our flex wheels 2 weeks ago we had some days working until 7:00 PM in the 2 weeks prior to our scrimmage. But it was worth the time!

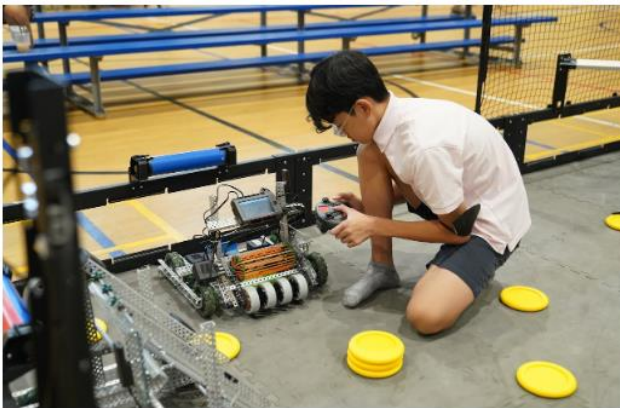
### 6.7.2 Getting things ready Saturday morning

We finally found the fitting screws for the practice field on Saturday morning. And since we had 12 kids visiting us from the charity [Poussières de Vie](#) we gave them something to do- assemble the perimeter ;)



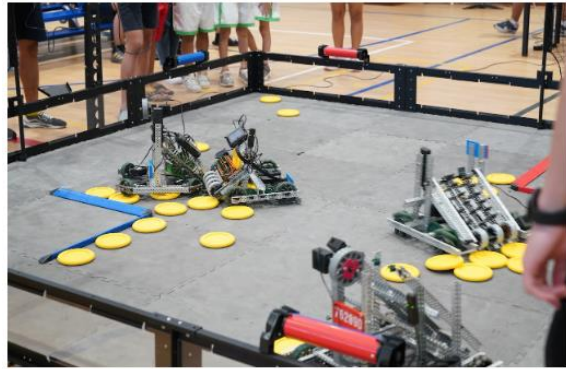


Since this was our first ever VEX event for literally every person, we had to overcome a series of technical difficulties (electricity, audio equipment, locked doors, how to work with TM on a Mac and the teams, correct settings, missing motors, empty batteries, remotes and network adapters suddenly no longer working, TM not permitting to drive - just to name a few) in addition to a limited knowledge of the game rules (what starting position?), we had to move our planned first match successively from 10:00 AM to **11:00 AM**. But then we managed **4 qualification matches!**



### 6.7.3 The competition - after 11:00

Yes, we had empty batteries during the match. And robots stuck on discs, unable to move. This will be more entertaining to watch in a video, and Meherika is uploading the best ones to our youtube-channel. The qualification ended and the winning team chose a partner for their alliance. The final match was close with 44 to 41 points, and (with some controversy) the winning teams are [76209D Kangaroos](#) and [76209R Racoons](#):



Qualification Rankings					Match Schedule and Results		
Rank	Team	WP	AP	SP	W-L-T	Match	Score
3	76209G Hanyu Baijiao	0.67	0.00	29.67	1-2-0	01 76209X 76209G	63
4	76209H Hanyu	0.00	0.00	29.67	0-3-0	02 76209G 76209X	61
1	76209D 4-Program	2.00	0.00	29.67	3-0-0	03 76209R 76209D	35
2	76209K Kai	1.33	0.00	29.67	2-1-0	04 76209D 76209G	Main Field
3	76209G Hanyu Baijiao	0.67	0.00	29.67	1-2-0	05 76209R 76209X	On Field
4	76209H Hanyu	0.00	0.00	29.67	0-3-0	76209D 76209G	Main Field



As the only person with VEX experience Ms. Suze was so kind to judge the teams and notebooks, interviewing all 4 participating teams to determine the winner of the Design Award. Again a win for our Rookie team! The fourth team member is Wayne on the phone ;)

And more inspiration and motivation for the other teams to work on their notebooks:

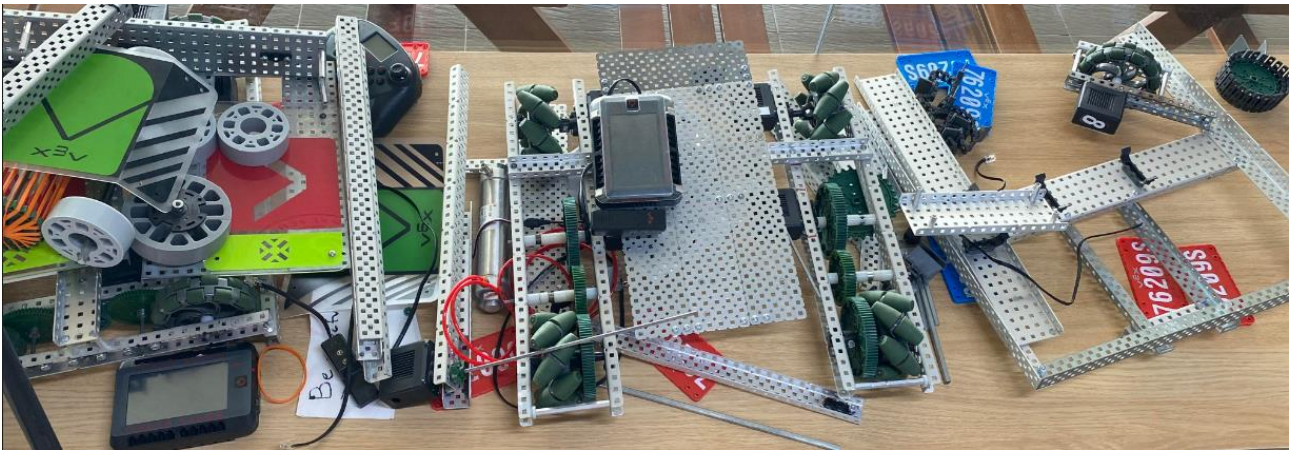


We had a lot of fun and certainly learned a lot. It's still a long way to go until the [National Championship Vietnam on February 11th, 2023](#). Yet we gained a lot of experience and can do many things better next year. Like having shooting mechanisms working on the robots too. Happy building!

#### 6.7.4 One week earlier

A week prior to the event there was still a lot of work to do! Several days working until 6:00 PM in the IDEA center, and one additional Saturday with 8 students on October 29th. Before that the completion rate of the robots looked like this:





## 6.8 World standings in Virtual Skills November 2022 - March 2023

Prior to the Nationals only our teams were present at the Virtual skills ranking. Here November 26th, 2022:

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region	Country / Region
87	157	11	76209X	Egg	Saigon South International School	Vietnam	Vietnam
153	86	27	76209G	Honey Badgers	Saigon South International School	Vietnam	Vietnam
159	77	36	76209D	Kangaroos	Saigon South International School	Vietnam	Vietnam
205	27	44	76209S	Serious Seniors	Saigon South International School	Vietnam	Vietnam
215	21	49	76209R	Raccoons	Saigon South International School	Vietnam	Vietnam

With the Vietnam Nationals event on February 11th the two teams from Chi Lang entered the competition and scored really well. Here from March 8th, 2023:

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region	Country / Region
92	212	3	65519A	Chi Lang Robotics - Vietnam	THPT Chi Lăng	Vietnam	Vietnam
110	202	1	76209R	Raccoons	Saigon South International School	Vietnam	Vietnam
177	157	11	76209X	Egg	Saigon South International School	Vietnam	Vietnam
244	113	14	65519Z	Chi Lang Teenagers	THPT Chi Lăng	Vietnam	Vietnam
290	86	27	76209G	Honey Badgers	Saigon South International School	Vietnam	Vietnam
306	77	36	76209D	Kangaroos	Saigon South International School	Vietnam	Vietnam
376	27	44	76209S	Serious Seniors	Saigon South International School	Vietnam	Vietnam

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region	Country / Region
30	208	2	76209M	Mission Impossible	Saigon South International School	Vietnam	Vietnam

Yet Alex from the MS team took on the challenge and got the highest score in Vietnam on March 23rd:

20	233	4	76209M	Mission Impossible	Saigon South International School	Vietnam	Vietnam
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One day later, March 24th, he improved his score and was now 10th in the world!

10	270	0	76209M	Mission Impossible	Saigon South International School	Vietnam	Vietnam
----	-----	---	--------	--------------------	-----------------------------------	---------	---------

Just 3 more days and Alex achieved the highest score possible: 322 points (all disks and rollers):

Rank	Score	Stop Time	Team Number	Team Name	Organization	Event Region	Country / Region
1	322	57	20944A	Apollo Argonauts	APOLLO MIDDLE SCHOOL	Florida - South	United States
2	322	56	15979K	Annihilation Robotics	EIT Academy	Texas - Region 2	United States
3	322	6	71832D	Riders II	Academia Robotica Pueblo	Paraguay	Paraguay
4	322	1	76209M	Mission Impossible	Saigon South International School	Vietnam	Vietnam
5	314	0	10102Z	Gentleminions	Vinci Robotics Academy	Southern New England	United States
6	301	58	22439A	Ponies	MILLBROOK MIDDLE SCHOOL	Alabama	United States

Which scored him 4th in the Middle school. And would have been 10th in High School!

## 6.9 Vietnam National Championship 2023 Spin Up - February 11th

Results on <https://www.robotevents.com/robot-competitions/vex-robotics-competition/RE-VRC-22-1135.html#results->



### 6.9.1 Participating teams - 12 teams from 5 schools (new record)



**10383C ISHCMC:AA - The Floppers**



**76209G Honey Badgers with robot Natasha**

Travis, Mary, Bomin, Milly, Quynh-Anh (Tina), Meherika

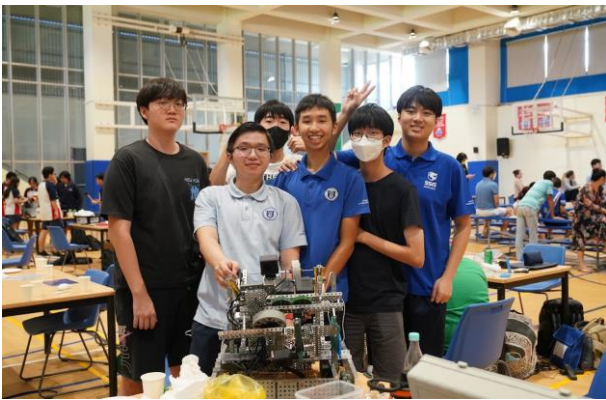




**89206A ISHCMC1**



**65519A Chi Lăng Robotics - Vietnam**



**76209D Kangaroos with robot Dog**

Yuseong, Anh Minh, Doyun, Dan, Dongjae, Justin



**76209R Raccoons and  
76209M Mission Impossible**

Jack, Duy (Alex), Jack, Bao Nghi, Aaron, Wayne



**10383B ISHCMC:AA - AAVNgers**



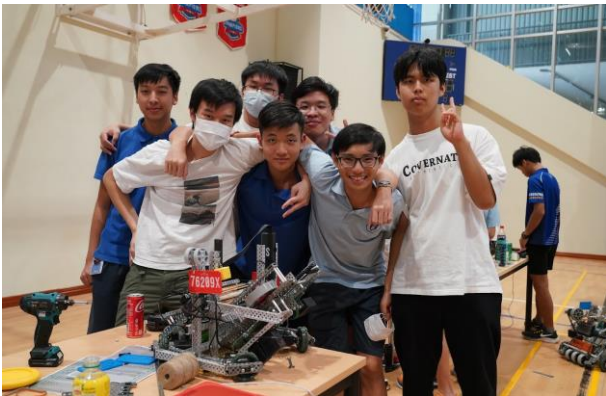
**10383A ISHCMC:AA - Back Souls**



**65519A Chi Lăng Teenagers**



**61142A Thunder Robotics - Concordia**



**76209X - Team Egg with robot Omelet**

Kenneth, Khang, Leo, Phu, Alex, Thai, Hawoon



**76209M Mission Impossible**

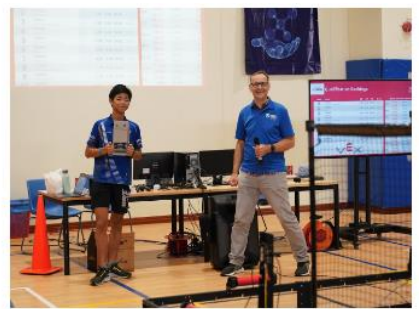
Ben, MinJun, Daniel, Bao, Duy (Alex), Justin, Chaewoo, MinSeo

Google		Qualification Rankings				VEX ROBOTICS COMPETITION			
Rank	Team	WP	AP	SP	W-L-T	Match Schedule and Results			
1	65519A Chi Lang Robotics - Vietnam	2.00	5.00	66.00	5-0-0	Q13	61142A	65519Z	92
2	61142A CISH Team A	1.60	4.00	44.60	4-1-0		76209X	89206A	26
3	10383A ISHCMC:AA - Back Souls	1.60	3.00	56.00	4-1-0	Q14	76209G	76209M	56
4	76209R Raccoons	1.20	2.00	50.60	3-2-0		10383C	76209R	68
5	10383C ISHCMC:AA - Hello Kitty	0.80	6.00	58.60	2-3-0	Q15	65519A	76209D	84
6	76209X Egg	0.80	6.00	45.60	2-3-0		10383A	10383B	73
7	76209D Kangaroos	0.80	3.00	59.00	2-3-0	QF 2-1	76209D	10383B	74
8	10383B ISHCMC:AA - AAVNgers	0.80	3.00	49.40	2-3-0		76209G	76209M	35
9	76209G Honey Badgers	0.80	2.00	51.80	2-3-0	QF 4-1	10383C	65519Z	42
10	76209M Mission Impossible	0.80	2.00	40.40	2-3-0		76209X	89206A	34
						SF 1-1	65519A	76209D	103
							10383A	76209G	54
						SF 2-1	61142A	10383C	On Field
							76209R	76209X	
						F 1	65519A	61142A	
							10383A	76209R	

The final match was actually between 4 different teams from 4 different schools!

**Congratulation to all the teams with their respective awards:**

Tournament Champions	65519A	Chi Lang Robotics - Vietnam
Judges Award	65519A	Chi Lang Robotics - Vietnam
Excellence Award - High School (VRC)	76209R	Raccoons
Design Award (VRC/VE XU/VAIC)	76209G	Honey Badgers
Tournament Champions	10383A	ISHCMC:AA - Back Souls
Excellence Award - Middle School (VRC)	76209M	Mission Impossible
Robot Skills Champion	65519A	Chi Lang Robotics - Vietnam



## 6.10 Robot Skills Challenge - March 18th, first ever in Vietnam

First time ever to have a [Spectators Reference Card](#) for this game. It looks like this:

### 2022-23 VEX Robotics Competition: Spin Up

Saigon South International School



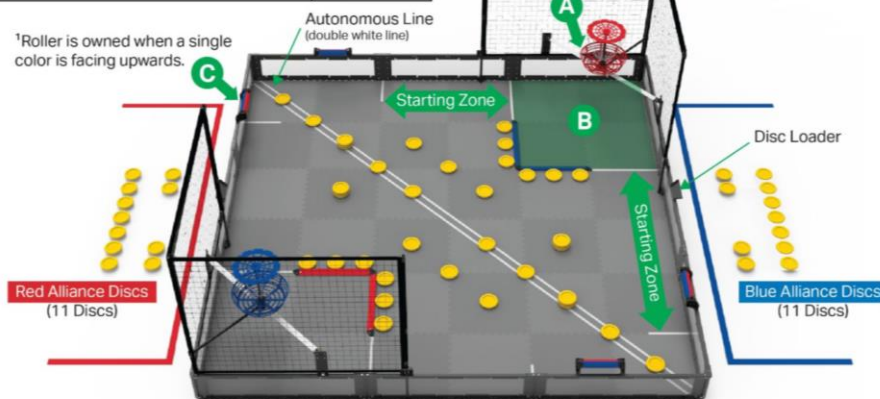
#### How the game is Scored

Each Disc Scored in a High Goal <b>A</b>	<b>5pts</b>
Each Disc Scored in a Low Goal <b>B</b>	<b>1pt</b>
Each Owned Roller <sup>1</sup> <b>C</b>	<b>10pts</b>
Each Covered Field Tile <sup>2</sup>	<b>3pts</b>
Autonomous Bonus Winner	<b>10pts</b>

**Endgame:** Final 10 seconds where robots can expand without limit to cover tiles.

**<sup>2</sup>Covered:** A non-goal tile touched by a robot at match end.

<sup>1</sup>Roller is owned when a single color is facing upwards.



Mobile app that provides realtime tournament status for:

- Schedule - Match times
- Ranking - Alliance selection
- Win/Loss record and Win Points
- Skills - Highest to lowest results
- Match results and awards



• Game Manual

#### Potential Awards List

##### Excellence\* (x1)

Awarded to the top overall team. Considers Skills Ranking, Qualification Ranking, Engineering Notebook, interview, and conduct.

**Additional Awards** (\*Judged award)

Tournament Finalists (x2), Innovate\*, Think\*, Amaze\*, Build\*, Create\*, Judges\*, Inspire\*, Energy\*, Sportsmanship\*

##### Tournament Champion (x2)

Awarded to the alliance that wins the Final in the Elimination Bracket.

##### Design Award\* (x1)

Awarded to the team with a strong engineering notebook and interview.

##### Robot Skills Champion (x1)

Awarded to the team with the highest combined Driving and Programming Skills scores.

And 3 teams were there! In order to get experience with this type of challenge we organized the first ever Robot Skills Event in Vietnam: the [Saigon Tournament Skills Only - Spin Up](#) on March 18th. Being just 6 weeks after the Nationals event no other school with their teams was ready to compete. And only 2 teams from SSIS were putting effort into the preparation - the two teams selected to present Vietnam at worlds. Meherika showed up for 76209G and with help from the coach she was able to program the robot, drive it and even get some autonomous points.

Rank	Team	Driver Attempts	Driver Highscore	Programming Attempts	Programming Highscore	Total Highscore
1	76209R	3	42	2	21	63
2	76209G	3	42	1	9	51
3	76209M	3	32	1	12	44

Remark: All three robots [76209R](#), [76209M](#) and [76209G](#) failed the inspection and had to adjust parameters to be allowed to participate. This seems to reflect on Nationals and foreshadow events to be happening at Worlds. Here are [the results of this event](#).

## 6.11 VEX Worlds in Dallas April 25th-27th (HS) and 27th-29th (MS)

The 5 students from 76209R Raccoons are ready to compete in the HS division with 815 other teams! And we have 5 students in 76209M to compete with 483 teams in the middle school. All other members of the SSIS Robotics club said farewell on April 20th:





Results:

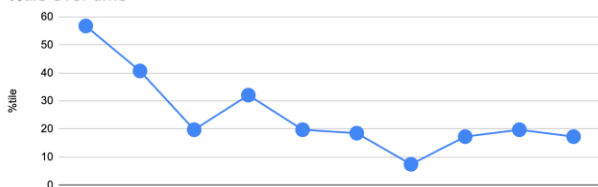
<https://roboticseducation.org/vex-robotics-world-championship/award-winners-vex-worlds-2023/>

Analysis: [in a Google Sheet Match setup and result](#)

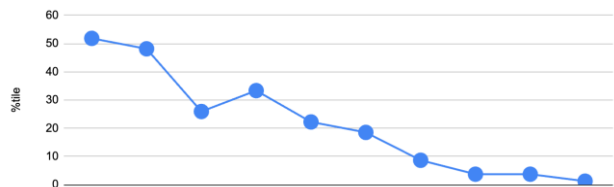
game	time	alliance	field	partner	team & state	WR	result	place	%tile	attempts	points	rank	#teams	%tile
P13	09:03	blue	MathWorks	4082C	Rocket Robots	300	107 : 144	27	67	1   0	16	299	312	4
Q6	09:58	red	Kettering	78887B	Knox Knights	652	22 : 173	39	52	1   0	16	337	347	3
Q24	11:05	red	Kettering	18522S	新起点机器人实验室S队	610	197 : 131	42	48	1   0	16	337	489	31
Q42	01:10	blue	Kettering	3723C	Galvatron	432	76 : 122	60	26					
Q75	03:09	blue	Kettering	95070C	Redwood Robotics	237	136 : 106	54	33					
Q89	03:59	red	TI	71610A	3 Musketeers	480	43 : 123	63	22					
Q102	04:45	blue	Kettering	4082C	Rocket Robots 2	300	105 : 200	66	19					
Q125	06:08	red	TI	37816J	The Chosen Ones	89	82 : 118	74	9					
Q142	08:15	blue	MathWorks	7481E	ElectroFrogs	230	52 : 210	78	4					
Q167	09:44	blue	TI	2011R	Rage	180	30 : 122	78	4					
Q191	11:09	blue	TI	11581F	Bad Bananas	229	69 : 108	80	1					
							win							
							disqualified							
							no show							

game	time	alliance	field	partner	team & state	WR	result	place	%tile	attempts	points	rank	#teams	%tile
P18	09:23	blue	Tesla	719S	Centeron, AR	1965	76 : 224	1	99	1   0	31	289	306	6
Q10	10:13	red	Kettering	70291A	Rustex, TX	602	32 : 57	35	57	2   0	31	336	355	5
Q24	11:05	blue	Tesla	54189J	Christmas Tree, Shanghai	-	233 : 66	48	41	3   0	36	386	412	6
Q54	01:53	blue	Tesla	96138A	Flying Falcons, NJ	720	70 : 146	65	20	3   1	52	374	417	10
Q67	02:40	red	Kettering	7110H	Fired Up!, TX	640	108 : 178	55	32	3   1	52	374	811	54
	04:09	blue	Magikid	11001X	Pentabotix, VA	-	85 : 130	65	20					
Q107	05:05	red	Magikid	6008H	Happy Hot Dogs!, DH	2402	172 : 152	66	19					
Q122	05:57	red	Magikid	71909R	Tesla Model R, LA	-	118 : 209	75	7					
Q157	09:12	blue	Kettering	16689B	Velocity, OR	-	222 : 146	67	17					
Q177	10:24	blue	Tesla	2602H	Hopkinetics, Heavy Metal, MA		158 : 106	65	20					
Q186	10:56	red	Tesla	4478N	Nova, CT	-	78 : 177	67	17					
							legend: win							
							disqualified							

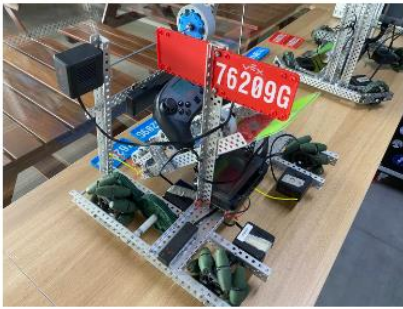
%tile over time



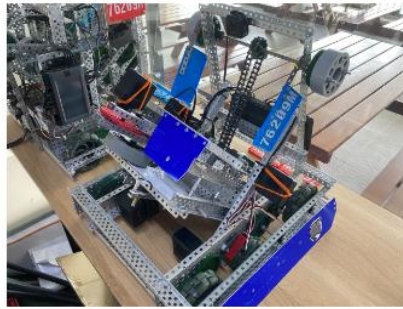
%tile over time



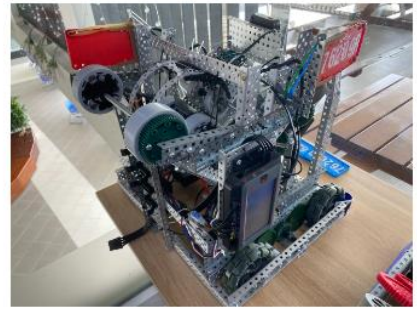
## 6.12 Robots after the return



76209G - Natasha



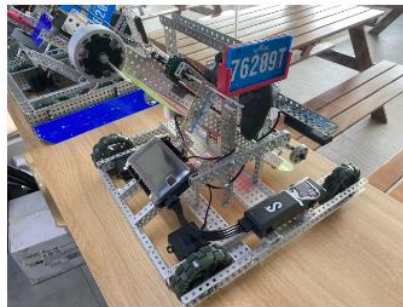
76209M - Ethan Hunt



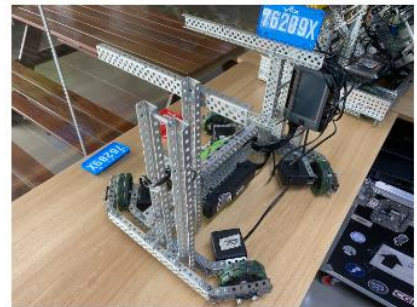
76209R - GruMobile



76209D - Dog



76209T - Transmission



76209X - Omelette

## 6.13 Election of a new leadership team

Instead of just 2 positions in the leadership team we now have 5 positions in SSIS Robotics with the VEX club. The presentations were held on May 15th and 18th. Result:

- New leadership team elected:
  - President: Tina
  - Vice-President: Thai
  - Secretary: MinSeo
  - Event-Manager: Mikel
  - Treasurer: Duy (Alex)

## 6.14 Last tournament - May 22nd

Leading up to the [Vietnam National Tournament on February 11th, 2023](#) it was clear that only 2 of 12 teams could win and go to VEX World in April. But the season is not over, and there are several months where teams apply what they learned, become better teams, continue the design cycle and improve their robots. If only there was an opportunity to showcase this progress!

### Finding a date

Two days after the Nationals event the [following spreadsheet](#) was shared with the coaches in Vietnam: [Possible date for Saigon Tournament 2023 Spin Up](#). In order to allow other teams to travel to SSIS it needs to be on the weekend, preferably on a Saturday.



Unfortunately, in most cases only a date towards the end of May was possible - after the world championship and IB/AP exams. The date of May 20th stood out. Chi Lang responded that they would not participate. With the required setup it would be best to have some of the 5 teams at SSIS ready, and then invite anyone to participate. If no one would show up it would still be a great experience for SSIS students and the organization team. As with the [scrimmage 2022](#).

## Limitations

After hosting 3 National events at SSIS we realized that with the time constraints we never included a Robot Skills part: 60 seconds driver skills, 60 seconds autonomous with only one robot on the field, and 3 attempts. This would put each team in a worldwide ranking of more than 5000 teams. But the finishing date for this ranking would be March 20th. Therefore May 20th is way too late to be posted on [robotevents.com](#) and be included in the ranking. We need an earlier date.

## First ever Robot Skills Event in Vietnam - March 18th

In order to get experience with this we organized the first ever Robot Skills Event in Vietnam: the [Saigon Tournament Skills Only - Spin Up](#) on March 18th. Being just 6 weeks after the Nationals event no other school with their teams was ready to compete. And only 2 teams from SSIS were putting effort into the preparation - the two teams selected to present Vietnam at worlds. Meherika showed up for 76209G and with help from the coach she was able to program the robot, drive it and even get some autonomous points.

## Saigon Tournament 2023 - May 20th

We wanted to invite at least AAVN to this event, but it needed to be organized and prepared. Returning from Worlds **early May** only robot 76209D was able to load and shoot disks. Anh Minh put some extra time and effort into making his robot better. The biweekly challenges were only attended by very few teams and robots, starting August 2022 (3 columns left) and continued in May 2023:

Around the Field Competition										
Which team is fastest around the field reaching all 4 corner tiles and return?										
Team	08/25	08/29	12/08	05/04	05/08	05/11	05/15	05/18	05/22	05/25
76209G		24.82		23.86	18:33					
76209X		18.98		17.54	12.15					
76209M			19:35							
76209T	34:45	31.77	19.84	14.12	16.43	13.03	13.11	12:42		
76209D				30.00		29.85	25.58			
76209R				16.24						
76209S						17:87	20.94	46.65		

With the new leadership team elected on May 18th it was the task of the old leadership team (Phu Le and Meherika Majumdar) together with the new president (Quynh-Anh (Tina) Nguyen), vice-president (Thai Le) and eventmanager (Mikel Aidan Torres) to organize this event on Saturday and update the coach.

Tina posted on Friday, May 19th at 18:46:

Hi everyone! After some surveys, we noticed that most teams could not be presented for the Skills Challenge this Saturday (May 20th). Therefore, the executives have agreed to **move this event to Monday next week (May 22nd) during club time from 15:30 to 16:30**. The challenge consists of two sections: Driver Skills and Autonomous Skills. We encourage all members to participate in this challenge because you will have limitless attempts to earn the highest point or switch the driver for the experience.

Furthermore, we will have a **pizza party** after the Skill Challenge on Monday to celebrate our achievements throughout this school year. We need to know who is showing up so we can make a pizza order, so please fill out the form below to vote for your favorite pizza toppings (or abstain because you have had too many pizzas this year).

The winning team will get extra food apart from pizzas : ) The Skills Challenge and the pizza party will be some of our last activities of this school year before everyone dives into the chaos of finals.

Sorry for the last-minute decision. We look forward to seeing all of you this Monday.

So it looks like it will not be a tournament, but only a skills challenge and a pizza party on Monday, May 22nd.

## Skills Challenge - May 22nd

Latest results:

Around the Field Competition											Robot Skills Challenge - Spin Up 2023								
Which team is fastest around the field reaching all 4 corner tiles and return?											Team								
Team	08/25	08/29	12/08	05/04	05/08	05/11	05/15	05/18	05/22	05/25	3/18	05/04	05/08	05/11	05/15	05/18	05/22	05/25	
76209G		24.82		23.86	18.33						51	12	52					65	
76209X		18.98		17.54	12.15							12	12					58	
76209M			19.35								44							28	
76209T	34.45	31.77	19.84	14.12	16.43	13.03	13.11	12.42				12	78	81	84	91	71		
76209D				30.00		29.85	25.58							57	53			48	
76209R				16.24							63	46						0	
76209S						17.87	20.94	46.65	32.76					12	12	24	24		

Robot Skills Challenge - Spin Up 22. 5. 2023						Competition results - Spin Up 22. 5. 2023					
Team	Driver skill	attempts	Prog. skill	attempts	Combined	Results: They are stored in the Tournament Manager.					
76209G	52	2	13	3	65	At 5:52 on May 22nd, 2023 - Team <b>76209M</b> was finally able FOR THE FIRST TIME to shoot a <b>disk</b> into the <b>high goal!</b> BIG celebrations for the 3rd team!					
76209X	55	2	3	1	58	No practice game was played. No qualifying game was played. We only worked on driver skills and programming skills. The coach could convince team G to participate - and with Tina they received the highest score, despite not wanting to play! Good second place for team X and respectable third place for team D.					
76209M	16	2	12	3	28	<ul style="list-style-type: none"> <li>● 1st place: 76209G with 65 points</li> <li>● 2nd place: 76209X with 58 points</li> <li>● 3rd place: 76209D with 48 points</li> </ul>					
76209T	52	1	19	1	71						
76209D	36	4	13	1	48						
76209R	0	0	0	0	0						
76209S	12	1	12	1	24						

At 5:52 on May 22nd, 2023 - Team **76209M** was finally able FOR THE FIRST TIME to shoot a **disk** into the **high goal!** BIG celebrations for the 3rd team!

Our coach could convince team G to participate - and with Tina they received the highest score, despite not wanting to play! Good second place for team X and respectable third place for team D.

- 1st place: 76209G with 65 points
- 2nd place: 76209X with 58 points
- 3rd place: 76209D with 48 points

## 6.15 VEX at the RESET art show - May 25th

We had the game set up, and two working robots to compete in Spin Up: 76209D Kangaroos and 76209X Egg:





Picture left:  
 Focused students on game,  
 robots and strategy with Anh  
 Minh readjusting the robot

Below: Yearbook #26 features  
 the SSIS Robotics club, now with  
 VEX in the name.



**VEX Robotics Club**

- Front row:** Law, Aaron, Goh, Wayne Jen, Yoon, Jiwon, Kwon, Bomin, Majumdar, Meherika, Weisblatt, Jack Nguyen, Thai, Bao Nhi, Pham, Thai (Travis) Hong, Le, Phu Vinh  
**Middle row:** Nguyen, Duy (Alex), Nguyen, Khang Dac, Le, Thai Nguyen Hoang, Torres, Mikel Aidan Samalio, Nguyen, My (Milly) Ngoc Tra, Pham, Dinh (Mary) Du, Pham, Anh Minh, Nguyen, Quynh-Anh (Tina), Ede, Suzanne  
**Back row:** Kreier, Matthias, Pham, Toan (Alex) Quang, Pham, Khoi (Justin) Nguyen, Wang, Yin-An (Kenneth), Chen, Po-Yen (Daniel), Lee, Dongjae, Kim, Doyun, Vu, Hung, Can, Dan, Han, Yuseong, Jung, Hawoon  
**Absent:** Nguyen, Nam Quoc, Huang, Jing-Xiang (Albert), Truong, Tin (Dipper) Vinh, Nguyen, Khanh Phuoc Gia, Do, Anh (Bona) Phan Viet, Nguyen, Bao-Anh Ngoc, Nguyen, Hoang (Danny)

Here are the teams, their team captains (**bold**) and their members (36 total) at the end of the season:

76209D (9): **Doyun** Kim, Thanh-Danh Benjamin Bui, Dongjae Lee, Khoi (Justin) Pham, Minh Pham, Jiwon Yoon, Junyi Seo, Duc (Dan) Can, Yuseong Han

76209G (6): Quynh-Anh (**Tina**) Nguyen, Thai (Travis) Pham, Bomin Kwon, Meherika Majumdar, Dinh (Mary) Pham, My (Milly) Nguyen

76209R (5): **Wayne** Jen Goh, Jiahui (Jack) Lin, Jack Weisblatt, Aaron Law, Bao Nhi Thai

76209X (7): Toan (Alex) Pham, Phu Le, Dac-**Khang** Nguyen, Yin-An (Kenneth) Wang, Hawoon Jung, Minchan (Leo) Kim, Thai Le

76209M (9): Duy (**Alex**) Nguyen, Ben Nguyen, Minseo Cha, MinJun Cho, Justin Law, Bao Truong, Hyunsoo (Daniel) Choi, Chaewoo Lee, I-Ning (Molly) Chiu

## 6.16 Summer school 2023

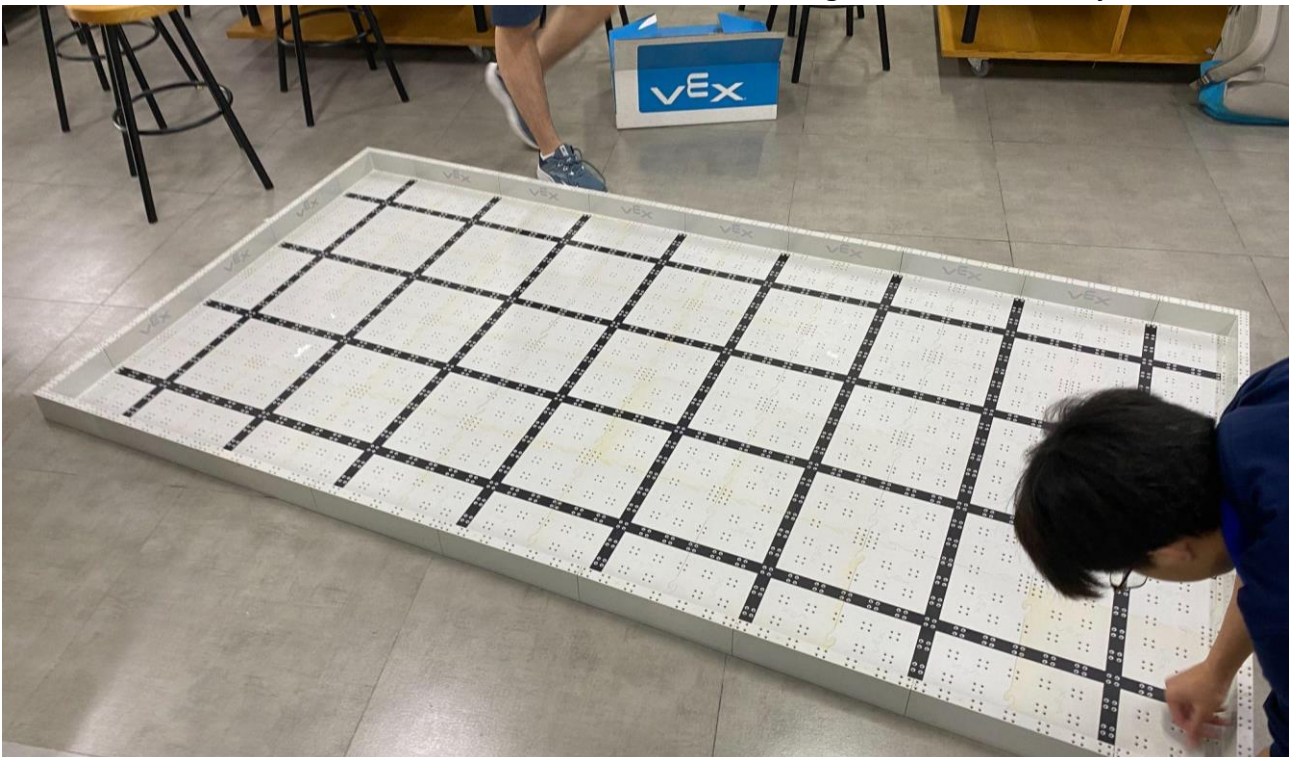
After the success of the [summer school in 2020](#) and the postponed [summer school in 2021](#) we finally wanted to make it happen. Covid-19 was over, but now a big construction project at SSIS is going on - a new MS building and a dedicated Science and Art center with large facilities for computer science and engineering at the ground floor. What could be possible?

[Citrus Circuits](#) (as FRC team 1678) has many students that want to share their knowledge and would support our students in organizing the summer school. 3 of their students together with Steve and Kathy would help SSIS to organize the school.



In December we ordered two VEX IQ v2 competition kits and an expansion set for our IQ field (we only have 4x8 tiles but need 6x8 tiles for a competition). Setup of the field takes 7 minutes for 1 person (see below test October 2022). Disassembly will take the same time. The two new robot kits and the expansion tiles arrived early 2023.

Our one VEX IQ kit v1 was reactivated with 2 new NiMH batteries. No student had used any of these robots so far. Mr. Maramba borrowed one kit to build a robot and get familiar with the system.



In February 2023 Citrus Circuits sent us room and material requirements:

## Room requirements

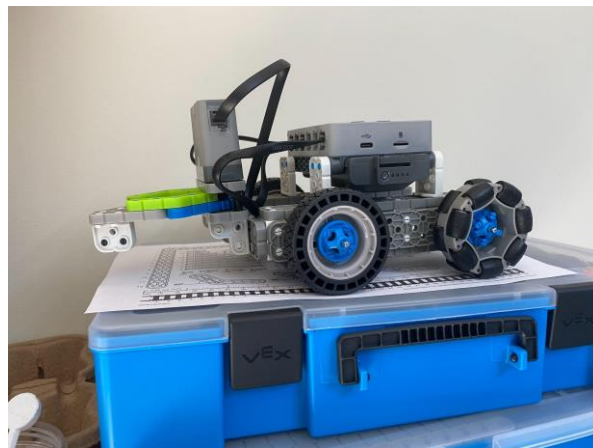
- Minimum 40 x 60 feet room
  - Bigger if there are many competition guests
- 24 campers divided into teams of 2
- Tables/desks and chairs for each set of campers (working room for campers)
- Space for 3 game fields (6 ft x 8 ft and require walking space) - approx 2-3 ft of open space around each side
- Area to eat lunch (can be outside)
- Electricity for computers/charging batteries

## Materials

- [12 VEX IQ robot kits](#)
  - 2 additional kits for spare parts
  - Extra controllers, batteries/battery chargers, motors
  - Extra parts that often go missing
- 12 laptops/computers + chargers (plus 2 extra sets)
  - Mice (can be helpful for students)
  - [VEXos Utility](#) and [VEXcode IQ](#)
  - Laptop with Tournament Manager
- Extension cords (6+) and power strips (12+)
  - Power splitters
- [3 full fields](#) (6 ft x 8 ft) and [3 field element sets](#) (put together before camp)
- First aid kit
- Awards (Citrus provides template, could have Vietnamese translation)
- PA system (with all needed cords)
  - Projector and screen (should be visible across room)
  - Microphones (2)
  - Speakers (2)
- Camp t-shirts and counselor/camper pins
- Recreational materials for breaks - arts and crafts, basketball, etc. (optional but recommended)
- Rolling whiteboard (optional)

Due to the ongoing construction at SSIS no visitors were allowed on campus over the summer. So a suitable room for the one-week workshop would have to be rented. In the end the summer school 2023 was postponed by another year to probably 2024. By then SSIS should have great new facilities to accommodate guests and an inspiring learning event!

For now we have Mr. Marambas robot in ES:



## 7. Season 2023-2024 Over Under

We brought some triballs with us from VEX Worlds in Dallas:



More to come ...

### 7.1 First meeting in the new season - August 2023

To be extended by our new secretary, MinSeo.

# A1 Overview

## A1.1 Competitions in the last years for 76209

- 2023-2024 Over Under Taipei Vietnam Tournament 4 VEX World V, M
- 2022-2023 Spin Up Taipei Vietnam Tournament VEX World R, M
- 2021-2022 Tipping Point - Covid-19 -
- 2020-2021 Change-Up Covid-19 Vietnam Tournament G, S, X Covid-19
- 2019-2020 Tower Takeover Formosa X, G Vietnam Tournament X, B Covid-19
- 2018-2019 Turning Point Formosa X VEX World X
- 2017-2018 In the Zone Bangkok B, G VEX World G
- 2016-2017 Starstruck

More in [this document](#).

# A2 The Team at SSIS: 76209

## A2.1 Important Information

Some relevant documents:

- [Robotics Information Document](#) (updated by Son Nguyen 2021-03-22)
- [VEX Robotics Legal Document](#) (updated by Son Nguyen 2019-09-29, not completely serious)
- [Overview Teams 2021-2022](#) with links to 6 digital engineering notebooks
- <https://ssis-vex-robotics.netlify.app/about> Website, updated 2022 (former members removed)
- [Sheet Teams Overview](#)

The number of teams grows from 1 or 2 to 3 competing teams in 2020-2021 out of 5 teams with the letters G, S, X, M and . In 2021-2022 due to the virtual school start it took until the second semester that the 6 teams A, B, C, D, E and F finally formed. This will be the foundation for the next season.

Team	76209G	76209X	76209S	76209R	76209D	76209M	76209B
Color	red	blue	purple	green	orange	yellow	
active since	2017	2018	2019	2022	2023	2023	2017
Team Name	Girls Rule	X-Men	Seniors	Rookies	Dragons	Masters	
Robot Name	Gipsy Danger	Matador Fury	Vulcan Specter	Tacit Ronin	Nova Hyperion	Cherno Alpha	
Leader	Tina	Khang	Daniel	Ian	Doyun	Vanessa	
Engineering Notebook 2022	<a href="#">Team C</a>	<a href="#">Team B</a>	<a href="#">Team A</a>	<a href="#">Team F</a>	<a href="#">Team D</a>	<a href="#">Team E</a>	
<a href="#">bit.ly</a> link	<a href="#">3Lj9ilv</a>	<a href="#">3lnOwX8</a>	<a href="#">3t5g0p1</a>	<a href="#">3slnnCq</a>	<a href="#">3yJ0cK9</a>	<a href="#">3wkTwCi</a>	



## A2.1.1 Team leaders

2017-2018

2018-2019

2019-2020

- G - Jaden Mecham ((10) Tin Nguyen, (11) Tung Hoang, (12) Jaden Mecham, SeJin Kim, Kamille Thai)
- S - Gavin Zhang ((9) Justin Chow, Hoang (Danny) Nguyen, Mayank Verma, Yoo-Bin Kim, (10) Hyeonjin Choi, Khoa Ngo, Peng (Gavin) Zhang, (11) Daeun (Ann) Chang, (12) Jihwan Kim)
- X - Hina Sekine ((10) Shayan Sinha, (11) Son Nguyen, Hina Sekine, (12) Forrest Keller, Vo Nguyen)
- Team 1 rookies: (9) Vanaak Lak, Yuan-Chih (Daniel) Lin, Phuc Nguyen, (10) Hoang (Leo) Nguyen, Tri Gian, (11) Vu (Evan) Pham, Merlissa (Lissa) Adona, Sean Chua

2020-2021

Starting with FRC, and then there are 3 varsity teams:



Hina with Gavin, Hyeonjin and Nam



Reslie with Khoa and Tung



Son with Yenny, Bao and Tin

2021-2022

- |                   |            |        |
|-------------------|------------|--------|
| ▪ S (A) - Daniel  | seniors    | purple |
| ▪ X (B) - Khang   | x-men      | blue   |
| ▪ G (C) - Tina    | girls rule | red    |
| ▪ D (D) - Doyun   | dragons    | orange |
| ▪ M (E) - Vanessa | masters    | yellow |
| ▪ R (F) - Ian     | rookies    | green  |

2022-2023

- X - X-Men - \*blue
- G - Girls - \*red
- S - Seniors - \*purple
- M - Masters - yellow
- D - Dragons - orange
- R - Rookies - \*green

## A2.2 Season 2022-2023 - Spin Up

There is still a lot of TBD. But we will work on Mondays and Thursdays to build the robots. The team leaders have to be present each time. And possible candidates to go to VEX World in May 2023 have to be present both times as well.

## A2.2.1 Timeline

Our plan for this season (finalized September 2022):

### April 2022

- Meet with Thien from LSTS to get to know one another
- Organize 6 teams at SSIS, building functioning robots for at least 2 robots to compete
- Document the work in [digital notebooks](#) for all teams
- First working prototype to [lift a mogo](#)

### May 2022

- ~~Watch the final matches~~
- ~~Meet with LSTS team (Lawrence S. Ting School) (visiting policy)~~
- Have functioning robots to have a local “Tipping Point” match (May ~~12th, 19th~~, 26th)
- Have autonomous rounds of Tipping Point with competing teams
- Order materials for the new season
- Presentation of Co-leader applicants (May 12th) and election, leaders announced May 19th: Phu and Meherika
- Contact other coaches at schools in Saigon/Vietnam - Meeting May 19th with David and Colin from BIS and Thomas from ISHCMC AA
- Robots on display in C222, with the 6 team plates
- Register 6 teams at [robotevents.com](#)
- [Example solution for pneumatics](#) to work
- Fix micro-USB connector for Brain 76209R, connect via bluetooth

### June 2022

- Battle on Friday: June 3rd, 3:00 PM.
- What does a world champion robot look like? <https://youtu.be/djy69yBg5l8>
- Preparing for Spin Up over the summer? Design in CAD with Fusion 360 and the included VEX Library, see this video: <https://youtu.be/s-ejWgVez8g>
- Information for Spin Up:
  - Trailer: <https://youtu.be/wlZgvVDZc2Y>
  - Hero reference design: <https://youtu.be/WUaVUGTpR6E>
  - Working catapult May 22nd: <https://youtu.be/93jLvTt2xfs>
  - Working robot 24h design: [https://youtu.be/HREf5wQD\\_4E](https://youtu.be/HREf5wQD_4E)

### August 2022

- Introduction, overview
  - General building tips: [https://youtu.be/akDIvT\\_dPgg](https://youtu.be/akDIvT_dPgg)
  - Choose the right drive: <https://youtu.be/Py14YTHCth0>
  - Possible design: [https://youtu.be/HREf5wQD\\_4E](https://youtu.be/HREf5wQD_4E)
- Get the materials, build the field, start building and programming
- Organize leaders

### October 2022

- ~~Visit to the new LSTS building to start collaboration and scrimmage~~

### November 2022

- Saigon Scrimmage Tournament with BIS, LSTS and ISHCMC AA

### December 2022

- Competition in Taipei/Formosa at the first weekend of December 3rd, 4th
- Students are not allowed to travel in the first semester, maybe Ms. Suze and Mr. Kreier visit

## January 2023

- Long break for SSIS from December 23, 2022 to January 29th, 2023. Teachers return January 30th, students return January 31st

## February 2023

- 3rd VEX Vietnam Tournament on February 11th (VTC is on 17th and 18th of February)

## March 2023

- Saigon Scrimmage Tournament with BIS, LSTS and ISHCMC AA ??

## April 2023

- Fly to VEX World in Dallas with two teams to compete internationally (April 25-29)

The above timeline was created in September 2022. And we achieved it by April 2023: We indeed went with 2 teams to VEX Worlds (76209M and 76209R to Dallas) and other parts were organized, too.

## May 2023

- New leadership team elected:
  - President: Tina
  - Vice-President: Thai
  - Secretary: MinSeo
  - Event-Manager: Mikel
  - Treasurer: Duy (Alex)

## A2.3 Season 2023-2024 Over Under

There is still a lot of TBD. But we will work on Mondays and Thursdays to build the robots. The team leaders have to be present each time. And possible candidates to go to VEX World in April 2024 have to be present both times as well.

### A2.3.1 Timeline

#### May 2023

- Skills challenge match on May 22nd
- Showcasing VEX on the art party "RESET" on May 25th
- Disassembling all robots and reorganizing all materials on May 29th

#### June 2023

- Information about "Over Under" for club members

#### August 2023

- Introduction to new team members, club exhibition, weekly presentations

# A3 Competition results

The next 3 pages were created April 2022 to get a first overview of the past tournaments.

## Results of Competitions 2018 - 2023

Teams	76209G	76209X	76209S	76209B
2017-2018 In the Zone				
Battle in Bangkok 2018	20			13
2018 VEX Robotics World Championship VEX Robotics Competition High School Division	78			
2018-2019 Turning Point				
Formosa VEX Turning Point 2018		18		
2019 VEX Robotics World Championship VEX Robotics Competition High School Division		97		
2019-2020 Tower Takeover				
Formosa VEX Tower Takeover 2019	19	11		
Vietnam VRC National Championship 2020	1	3	2	
2020 VEX Robotics World Championship VEX Robotics Competition High School Division*	91			
2020-2021 Change Up				
Vietnam VRC National Championship 2021	3	1	5	
2021-2022 Tipping Point				
<a href="#">Virtual Skills Standings</a>		11		
2012-2023 Spin Up				
Formosa VEX Spin Up 2022				
Vietnam VRC National Championship 2023				
2023 VEX Robotics World Championship VEX Robotics Competition High School Division				

\* Only virtual compilation of previous gained results

\*\* Team 76209M never took part in a competition on RobotEvents.com

## Results per Team

### 76209B

VRC 2017-2018: In the Zone

	Rank	Wins	Losses	Ties	WP / AP / SP
Battle in Bangkok 2018	13	2	3	0	4 / 0 / 71

### 76209G

VRC 2020-2021: Change Up

	Rank	Wins	Losses	Ties	WP / AP / SP
Vietnam VEX National Tournament	3	2	2	0	4 / 18 / 22

VRC 2019-2020: Tower Takeover

	Rank	Wins	Losses	Ties	WP / AP / SP
2020 VEX Robotics World Championship - VEX Robotics Competition High School Division	91	1	10	0	2 / 0 / 0
Vietnam VRC National Championship	1	6	2	0	12 / 42 / 61
Formosa VEX Tower Takeover 2019	19	4	4	0	8 / 27 / 92

VRC 2017-2018: In the Zone

	Rank	Wins	Losses	Ties	WP / AP / SP
2018 VEX Robotics World Championship - VEX Robotics Competition High School Division	78	3	7	0	6 / 10 / 384
Battle in Bangkok 2018	20	0	5	0	0 / 0 / 53

### 76209M

No results yet on RobotEvents.com

### 76209S

VRC 2020-2021: Change Up					
	Rank	Wins	Losses	Ties	WP / AP / SP
Vietnam VEX National Tournament	5	0	4	0	0 / 6 / 30

VRC 2019-2020: Tower Takeover					
	Rank	Wins	Losses	Ties	WP / AP / SP
Vietnam VRC National Championship	2	6	2	0	12 / 36 / 59

## 76209X

VRC 2020-2021: Change Up					
	Rank	Wins	Losses	Ties	WP / AP / SP
Vietnam VEX National Tournament	1	3	1	0	6 / 18 / 28

VRC 2019-2020: Tower Takeover					
	Rank	Wins	Losses	Ties	WP / AP / SP
Vietnam VRC National Championship	3	5	2	1	11 / 33 / 78
Formosa VEX Tower Takeover 2019	11	5	3	0	10 / 42 / 57

VRC 2018-2019: Turning Point					
	Rank	Wins	Losses	Ties	WP / AP / SP
2019 VEX Robotics World Championship - VEX Robotics Competition High School Division	97	0	11	0	0 / 16 / 97
Formosa VEX Turning Point 2018	18	4	3	0	8 / 8 / 53

## A4 Historic Performance of 76209 in 2017-2024

Challenge	Local Tournament	International Tournament	Vietnam National Tournament	VEX Worlds
2017-2018 In the Zone		<a href="#">Battle in Bangkok 2018</a> 76209B 13/20 0p, 76209G 20/20 5p		<a href="#">2018 VEX Robotics World Championship - VEX Robotics Competition High School Division</a> 76209G 78/96 in division 'Technology' (1/6)
2018-2019 Turning Point	[76209G] [76209S] [76209M]	<a href="#">Formosa VEX Turning Point 2018</a> 76209X 18/36 4p		<a href="#">2019 VEX Robotics World Championship - VEX Robotics Competition High School Division</a> 76209X 267/305 skills 11p, and 97/97 in division 'Research' (1/6)
2019-2020 Tower Takeover	[76209B]	<a href="#">Formosa VEX Tower Takeover 2019</a> 76209X 11/36, 76209G 19/36	<a href="#">Vietnam VRC National Championship</a> 76209G 1/8, 76209S 2/8, 76209X 3/8	<a href="#">2020 VEX Robotics World Championship - VEX Robotics Competition High School Division</a> <b>Covid-19</b> Calculated 76209G 91/93 in division "Engineering" (1/6)
2020-2021 Change Up		<b>Covid-19</b>	<a href="#">Vietnam VEX National Tournament</a> 76209X 1/5, 76209G 3/5, 76209S 5/5	<b>Covid-19</b>
2021-2022 Tipping Point	[76209X]	<b>Covid-19</b>	<b>Covid-19</b>	<b>Covid-19</b>
2022-2023 Spin Up [76209S]	<a href="#">Scrimmage 2022 at SSIS</a> 76209X 1/4, 76209D 2/4, 76209G 3/4, 76209R 4/4 <a href="#">Saigon Tournament Skills Only - Spin Up</a> 76209R 1/3 63p, 76209G 2/3 51p, 76209M 3/3 41p	<b>Covid-19</b>	<a href="#">Vietnam VEX National Championship</a> 76209R 4/12, 76209X 6/12, 76209D 7/12, 76209G 9/12, 76209M 10/12	<a href="#">2023 VEX Robotics World Championship - VEX Robotics Competition High School Event</a> 76209R 67/81 total 815  <a href="#">2023 VEX Robotics World Championship - VEX Robotics Competition Middle School Event</a> 76209M 80/81 total 495
2023-2024 Over Under				

# A5 History for each team with members and pictures

76209G

The oldest SSIS Team continuously competing! <https://www.robotevents.com/teams/VRC/76209G>

2022-2023 Spin Up

Team **Honey Badgers** with robot **Natasha**

Programmer: Meherika, Bomin

Driver: Tina

Builder: Bomin, Mary, Meherika, Milly, Travis, Tina

Documentation and notebook: Travis

Social media: Travis

R&D mechanical design:

- Drive base: Tina
- Shooting: Milly
- Roller: Bomin, Tina
- Endgame expansion: Travis



Scrimmage 2022 at SSIS:

**3rd place!** 2 wins and 2 losses, some 4 WP, no AP and 112 SP.

At the third Vietnam VEX National Championship on February 2nd, 2023:



Result: 76209G won the **DESIGN AWARD!**



## 2021-2022 Tipping Point

Our team members:

- Tina (captain)
- Milly
- Meherika
- Bomin
- Han



**Mini Tournament "Tipping Point" on June 3rd, 2022.**

There is a [video on Youtube](#) from the second match. The blue alliance scored 150 points!

There are 100 base points if the team shows up for the competition. Winning the autonomous game gives 5 points.

<b>76209G</b>	<b>100</b>	<b>40/150/60</b>	<b>5</b>	<b>=</b>	<b>355</b>	<b>Driven by Tina</b>
76209X	100	90/40/60	0	=	290	Driven by Khang
76209M		90/150/40	5	=	285	Driven by Hawoon
76209D		40/40/40	0	=	120	Driven Milly

## 2020-2021 Change-Up

Our team members were:

- Hina Sekine
- Gavin
- Hyenonjin
- Nam

Vietnam VRC National Tournament 2021:  
**3rd place!** 2 wins and 2 losses, some 4 WP, 18 AP and 22 SP.



## 2019-2020 Tower Takeover

### **Formosa VEX Tower Takeover 2019:**

Place 19 with 4 wins and 4 losses. 8 WP, 27 AP and 92 SP.

Our team members were:

- Hina Sekine
- Shayan
- Quang

### **Vietnam VRC National Championship 2020:**

1st place! 6 wins and 2 losses, some 12 WP, 42 AP and 61 SP.

### **2020 VEX Robotics World Championship VEX Robotics Competition High School Division\* (virtual):**

Place 91, held virtual because of Covid-19. 1 win and 10 losses to have 2 WP awarded, no AP or SP.



## 2018-2019 Turning Point

The team did not participate this year.

## 2017-2018 In the Zone

### **Battle in Bangkok 2018:**

Place 20 - the first international competition. While not getting win points or autonomous points, overall the team got some 53 schedule points.

### **2018 VEX Robotics World Championship VEX Robotics Competition High School Division:**

Rank 78 worldwide with 3 wins, 7 losses, 6 winpoints, 10 autonomous points and total 384 schedule points!

Results on robotevents.com <https://www.robotevents.com/teams/VRC/76209G>

# 76209X

The second oldest Team at SSIS - since 2018. <https://www.robotevents.com/teams/VRC/76209X>

## 2022-2023 Spin Up

### Team Egg



- Khang (captain)
- Phu
- Kenneth
- Leo
- Hawoon
- Daniel
- Thai
- Alex


Robot: **Omelet**



### Team members

From their website: <https://sites.google.com/ssis.edu.vn/76209x>

		
<b>Hawoon</b> Media (guy who created this website)	<b>Phu</b> Club president	<b>Khang</b> Captain

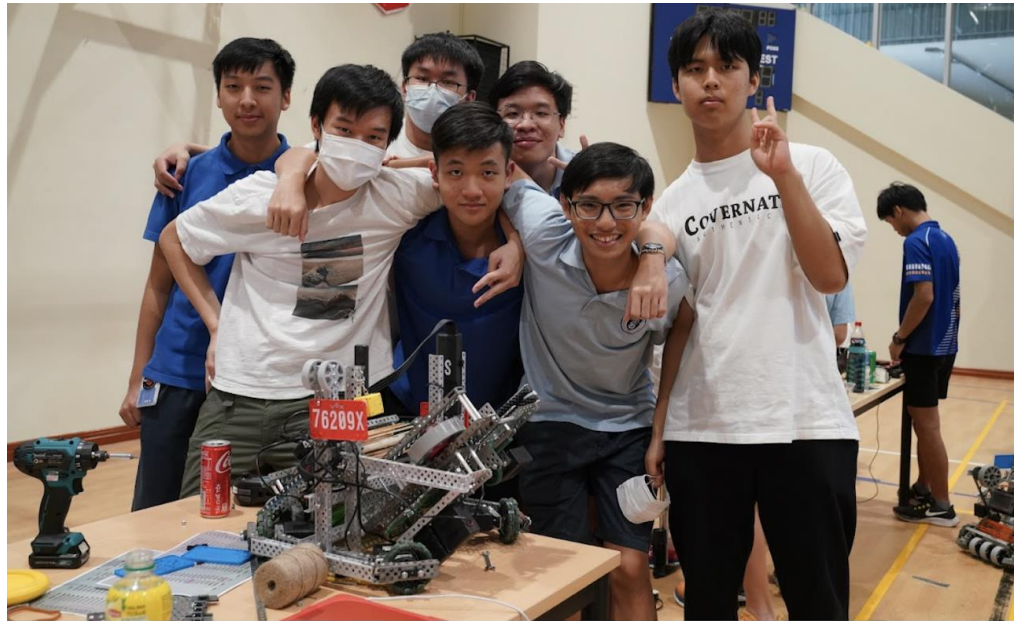
			
<b>Alex</b>	<b>Kenneth</b>	<b>Alex</b>	<b>Thai</b>

The paths we took...

VEX Vietnam National

February 11, 2023

Our group photo

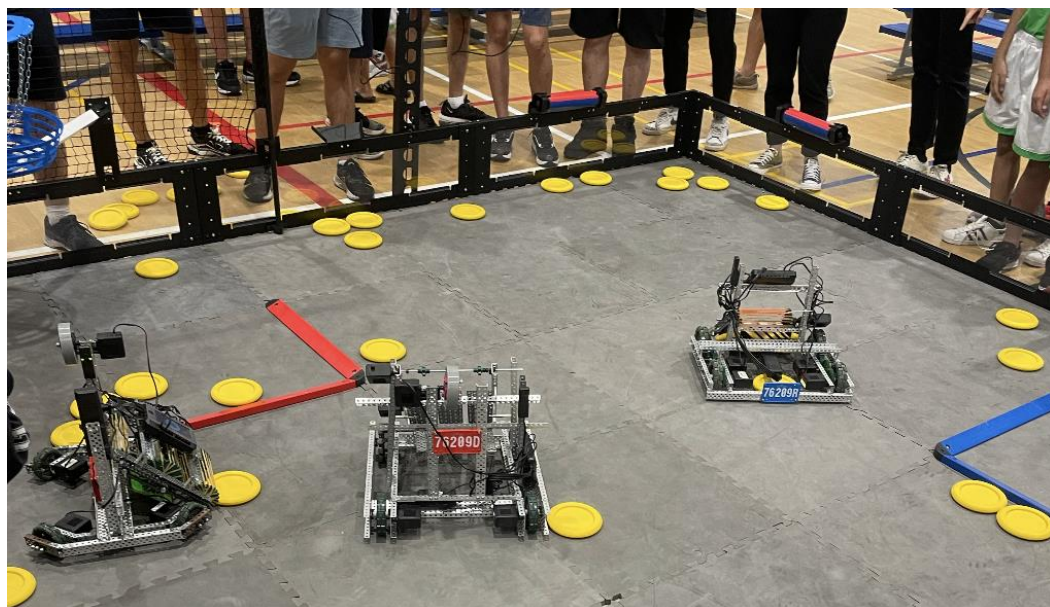


Phu and me



Photo with a vis girl and travis

SSIS Scrimmage, November 5th, 2022



Robots competing (left one is ours)

Scrimmage 2022 at SSIS:

1st place! 3 wins and 1 loss, some 6 WP, no AP and 112 SP.

## 2021-2022 Tipping Point

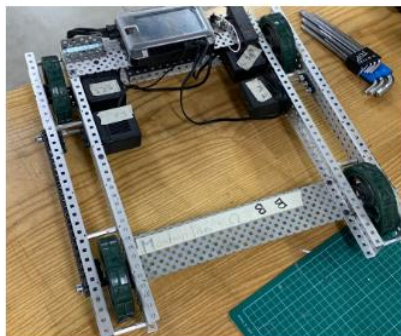
Team **Eggs**

- **Khang** (captain)
- Phu
- Kenneth
- Leo
- Hawoon
- Daniel
- Thai
- Alex

Robot: **Quantum Gravity**



Some documentation of the building process:



On June 2nd, 2022 we hosted a scrimmage and the team got second place:

76209G	100	40/150/60	5	=	355	Driven by Tina
<b>76209X</b>	<b>100</b>	<b>90/40/60</b>	<b>0</b>	=	<b>290</b>	<b>Driven by Khang</b>
76209M		90/150/40	5	=	285	Driven by Hawoon
76209D		40/40/40	0	=	120	Driven Milly

## 2020-2021 Change Up

Vietnam VEX National Tournament 2021: **1st place!** 3 wins and 1 loss, some 6 WP, 18 AP and 28 SP.

## 2019-2020 Tower Takeover

Formosa VEX Tower Takeover 2019: **Place 11** with 5 wins and 3 losses. 10 WP, 42 AP and 57 SP.

Vietnam VRC National Championship 2020:

**3rd place!** 5 wins and 2 losses plus 1 tie, some 11 WP, 33 AP and 78 SP.

## 2018-2019 Turning Point

Formosa VEX Turning Point 2018:

**Place 18** with 4 wins and 3 losses, 8 WP, 8 AP and some 53 schedule points.

2019 VEX Robotics World Championship VEX Robotics Competition High School Division: **Rank 97** worldwide with 0 wins, 11 losses, 0 win points, 16 autonomous points and total 97 schedule points!

## 2017-2018 In the Zone

The team did not participate this year.

## 76209S

### 2022-2023 Spin Up

The team did not successfully form after the initial weeks in September 2022.

### 2021-2022 Tipping Point

## 76209 S - Saigon Dragons

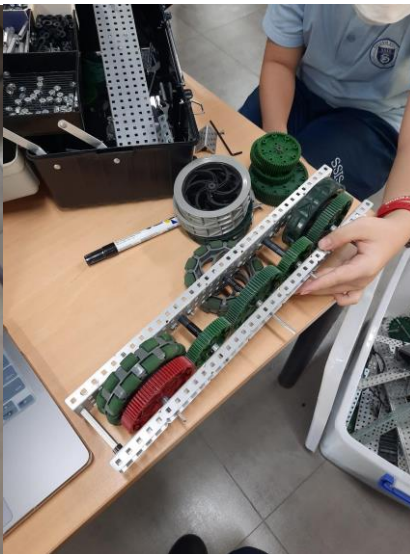
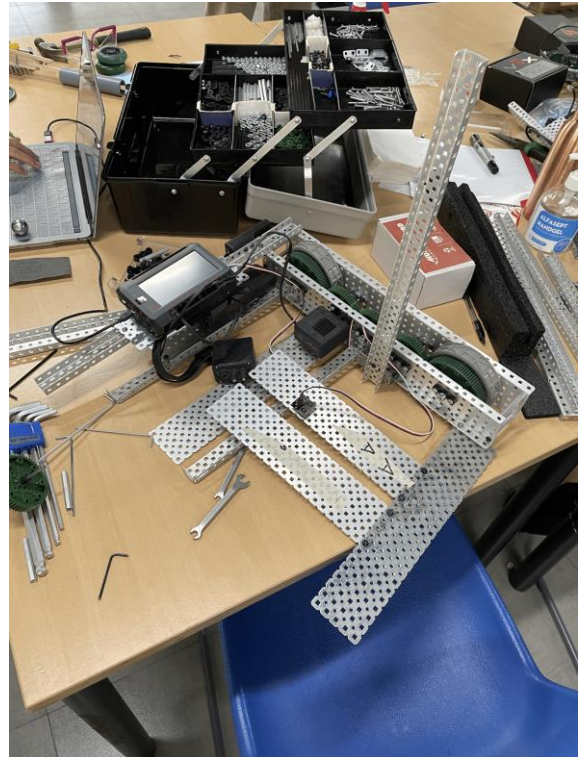
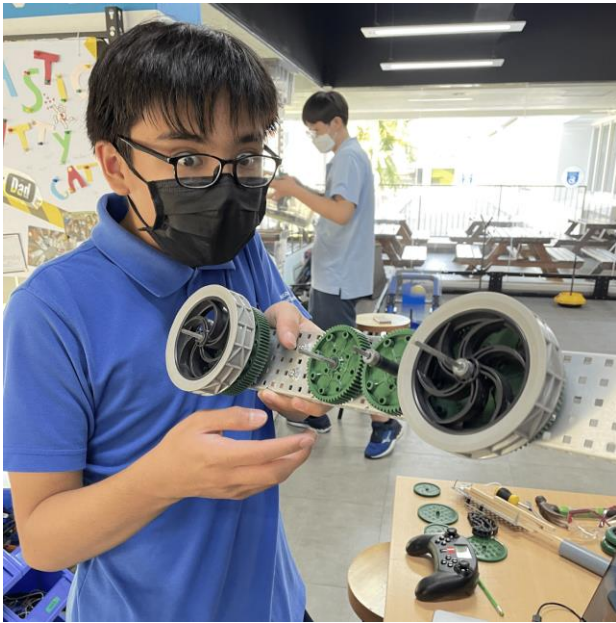
Leader: **Daniel**

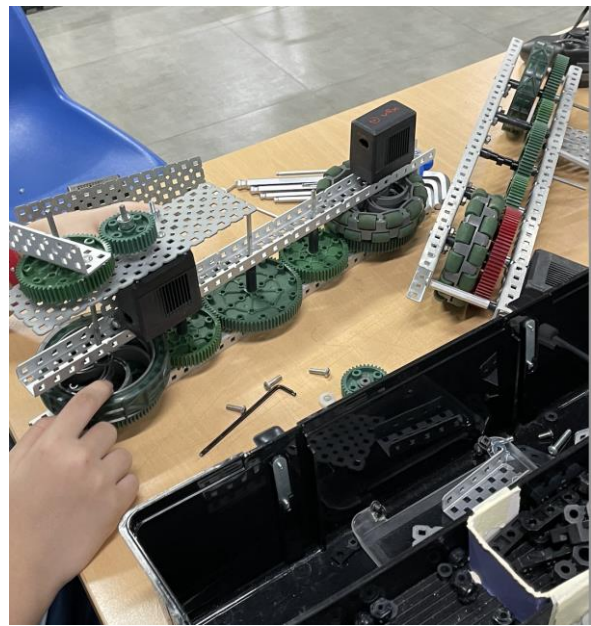
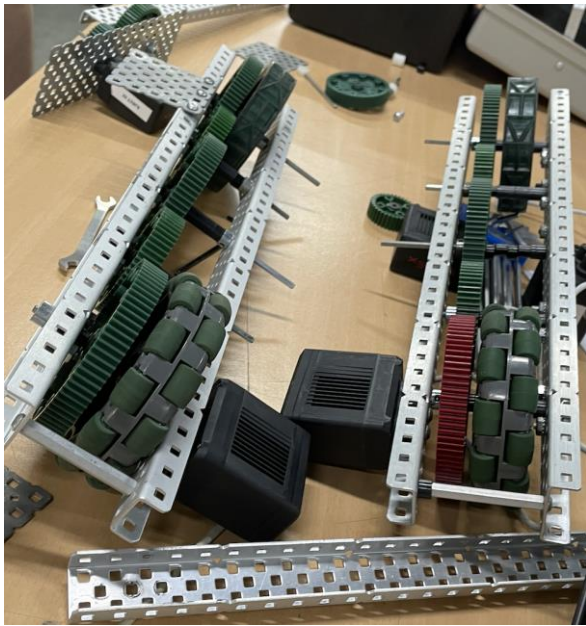
Members: Khoa, Mikel, Anh Minh

Robot name: **Vulcan Specter**



Building progress early 2022:





## 2020-2021 Change-Up

Vietnam VEX National Tournament 2021: **5th place!** 0 wins and 4 losses, some 0 WP, 6 AP and 30 SP.

## 2019-2020 Tower Takeover

Vietnam VRC National Championship 2020: **2nd place!** 6 wins and 2 losses, some 12 WP, 36 AP and 59 SP.

## 76209M

## 2022-2023 Spin Up

Now working as a real Middle School team:





Reactivated by accident as a Middle School team in September 2022 we reached out to MS after the scrimmage if students would be interested to join. More on their history is published on a story at the SSIS website. They are the first MS team to go to VEX Worlds!

## 2021-2022 Tipping Point

Without knowing that this team is officially a middle school team (M stands for Masters) they successfully build a robot:

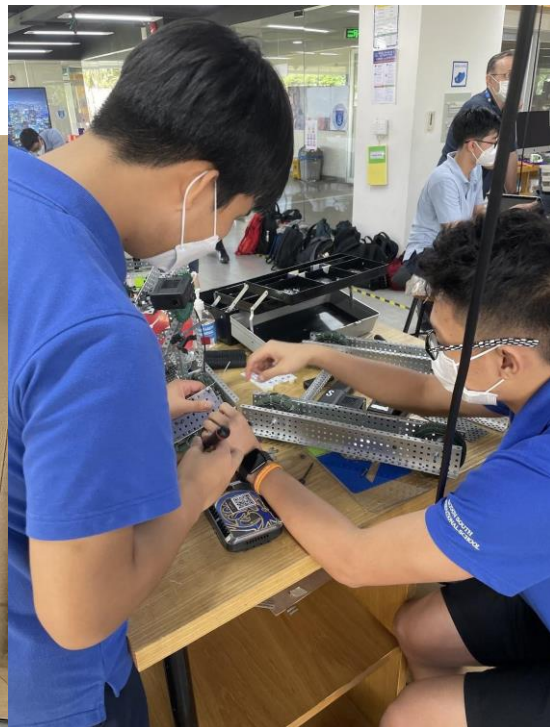
### 76209 M - Masters

Leader: **Vanessa**

Members: Hawoon, Danny and Jinwoo

Robot name: **Cherno Alpha**

Building pictures:



# 76209D

This team was founded in 2020 for the "Tipping Point" competition.

2022-2023 Spin Up

## Team **Kangaroos**

- Programmer: Dongjae, Justin, Doyun, Dan
- Driver: Justin, Dan
- Builder: Minh, Doyun, Dongjae
- Documentation and notebook: Justin, Doyun
- Social media: Yuseong, Justin
- R&D drive base: Doyun, Dongjae, Justin, Minh
- R&D shooting: Doyun, Minh, Justin
- R&D mechanical design: Minh, Justin
- R&D control mechanism: Dongjae, Minh, Justin



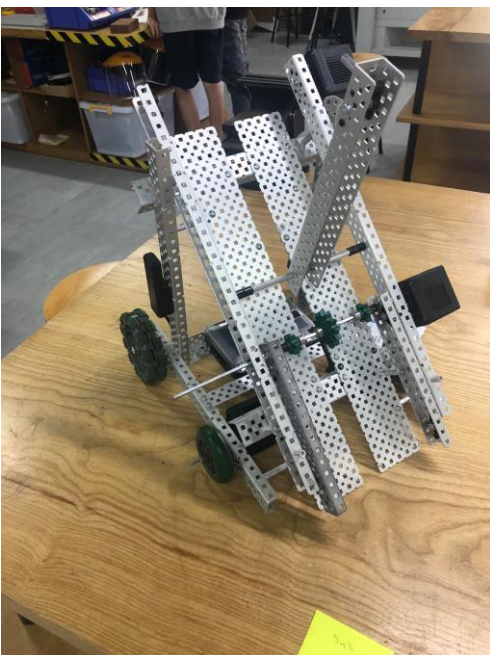
Robot: **Dog**

Scrimmage 2022 at SSIS:

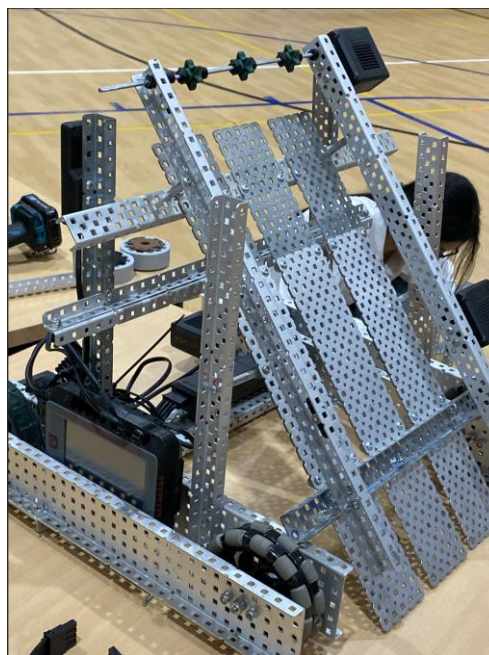
**2nd place!** 3 wins and 1 loss, some 6 WP, no AP and 112 SP.

Robot Design History:

First design

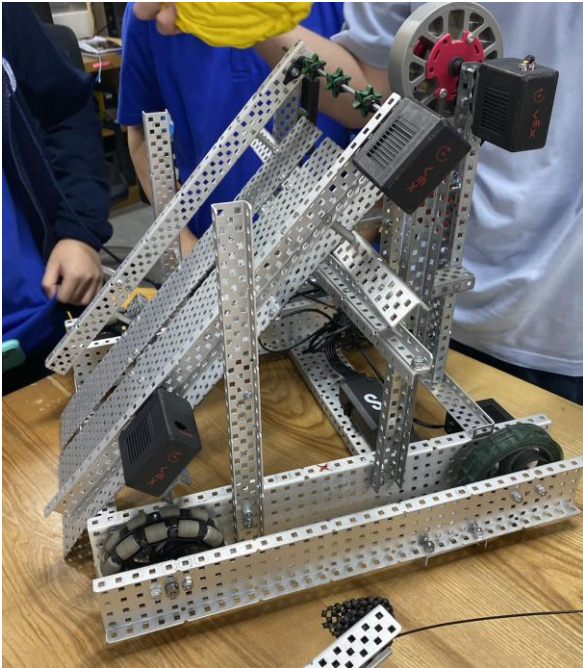


Second Design

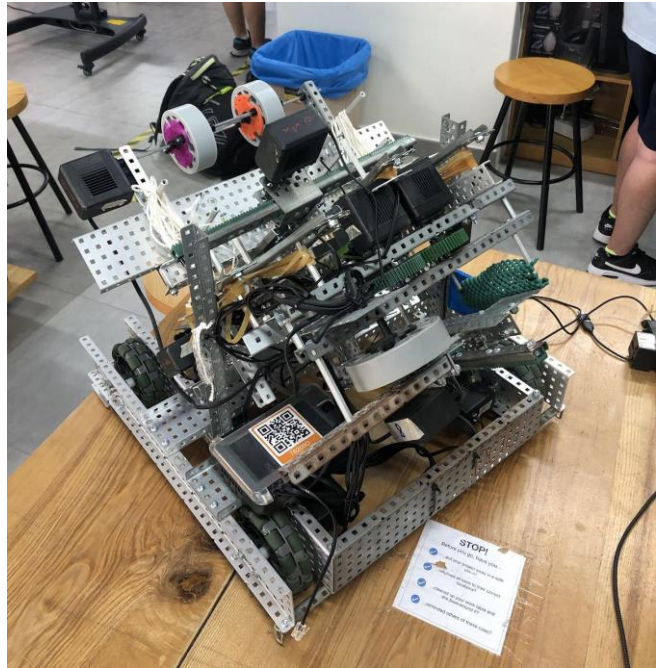


We noticed that our robot was unable to load up the disk and shoot because of its short width. So we used a bigger intake to enlarge the robot and expanded the base of the robot.

Third design:



Fourth and final design (for showcase at RESET 2023)

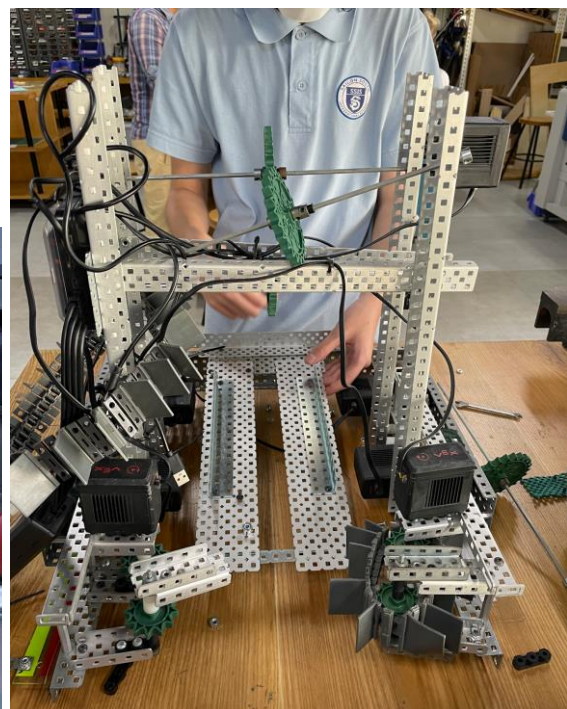
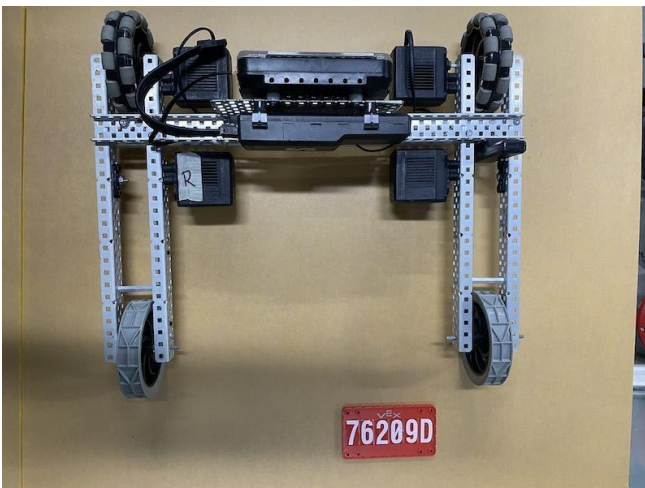


## 2021-2022 Tipping Point

### Team **Dragons**

- **Doyun** (captain)
- Yuseong
- Tom

### Robot: **Dragons Robot Power**



## 76209R - The Rookies

Starting in 2021-2022 we have a rookie team, only members from grade 9 - with support, of course. Actually, they don't need a lot of support, and are moving forward really fast! They were the first to develop and test a shooting mechanism for the "Spin Up" season! Demonstration on Instagram - follows.

<https://www.robotevents.com/teams/VRC/76209R>



### 2022-2023 Spin Up

First season for team 76209R. And what a start! Leading up to the scrimmage 2022 we had many firsts in this team - use of pneumatics, shooting disks, to name a few.

## 76209 R - Rookies

Leader: **Wayne**

Members:

Quang, Bao Nhi, Aaron, Albert, Phu Lam, Jack T, Jack W, Phu Lam,

Team name:

**Racoons**

Robot name:

**GruMobile**



**Robot name: GruMobile**



## 76209V

Team Vector - a new team for 2023-2024 Over Under, formed from 76209R Raccoons and 76209M Mission Impossible

2023-2024 Over Under

Team members: Wayne, Bao Nhi, Jack, Jack, Aaron, Alex

## Version history of this document

- 0.1 2022-04-06 First rough scaffold, 593 words
- 0.2 2022-04-30 With access to <https://www.robotevents.com/account> more details about historic events could be added. Now events in Asia and the World date back to 2017. More names and emails. 1919 words
- 0.3 2022-05-12 Some video links for historic events. Teams for Vietnamese competition, and fist match 2022 plus visit from coaches to SSIS. 2615 words
- 0.4 2022-05-16 Rankings from 2018 to 2021 included, 2862 words, 20 pages
- 0.5 2022-05-30 Link to [engineering notebook 76209G from 2019-2020](#), 4074 words, 30 pages
- 0.6 2022-05-31 Found Hina's documentation and added it as 4.6 to this document, 39 pages
- 0.7 2022-08-26 Some updates with the new season, club fair on August 26th, rescheduled National Competition on February 11th, 2023 (1 week earlier), 4581 words, 41 pages
- 0.8 2022-09-13 4618 words
- 0.9 2023-04-16 Scrimmage, VEX Nationals and skills just happened, heading for worlds! 4423 words on 39 pages
- 0.10 2023-05-19 Election of new leadership team documented (5/18), MinSeo new secretary, 4481
- 0.11 2023-05-21 More history from 2022-2023, 5945 words, 58 pages
- 0.12 2023-05-22 Updated Saigon Tournament May 22nd, 2023, 7462 words, 68 pages
- 0.13 2023-05-26 Included a few yearbook photos for teams from the past, 7879 words, 72 pages
- 0.14 2023-06-09 Updated with art show "RESET" and the participation of the VEX club plus some further information on each team, 9594 words, 81 pages
- 0.15 2023-08-02 Added visit of [Citrus Circuits](#) and Poussieres de Vie in October, summer school 2023, 86 pages, 10508 words