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World Robotics Olympiad at Hungary

- Year level **Significant Awards**
- Result **Experiences**
- Category **Contests - Development**
- Tags **Code - Contests**
- Description 2 bots. 1 Infrared ball.
- Date April 20, 2016
- Ended September 11, 2019
- 1 more property

Comments

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- Represented the Philippines as Captain of the RoboSoccer team at the World Robotics Olympiad 2019 at Hungary after besting 7 national teams with the proportional-integral-derivative (PID) controller.

8/2018 - 9/2019

I participated in the World Robotics Olympiad (WRO) for four consecutive years as team captain and an algorithm engineer in Robot Soccer. Before that, I had to learn self-correcting algorithms, such as the proportional-integral-derivative (PID) controller on my own while championing my team through the Lapu-Lapu division level against three teams, then the nationals: where we won 3rd of the eight participating schools nationwide. We represented the Philippines on the WRO-2018 Invitationals and placed 10th; on WRO-2019 and placed 6th in our bracket.

Mary Grace Agnes

Robotics Coach

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<http://felta.ph/2019/4th-lapu-lapu-robotics-cup-supported-by-hon-mayor-junard-ayong-chan/>

<http://www.techbeatph.com/wproot/2019/09/15/18th-philippine-robotics-olympiad/>

<https://www.youtube.com/watch?v=bjiHhMB94G4>

<http://felta.ph/2018/amazing-world-robot-olympiad-friendship-invitational-2018/>

<http://felta.ph/2019/philippine-robotics-team-bags-gold-world-robot-olympiad-finals-hungary-2019/>

A chronological list of evidences for my division, national, and international wins are

uploaded. Similarly, the links listed follow the division-national-international pattern in descending order.


Explain Ask AI Comment Text B I U S </> √ ∅ A ...

WRO 2019 Annual report PDF too big


WROinvitationals2018-CEBU-SCORESHEET-FINAL-ROBOT-SOCCER.pdf 545.1KB

18th-PRO2019-ranking-robot-soccer.pdf 72.8KB

2019_11_08-10 - Hungary Robotics Cert - Carl.pdf 265.3KB



Republic of the Philippines
Department of Education
Region VII, Central Visayas
DIVISION OF LAPU-LAPU CITY
B.M. Dimataga St., Lapu-Lapu City



Attachment No. 3 of Division Memorandum No. ____

Winners of the 4th Lapu-Lapu City Robotics Cup 2019 and the Official Delegates of Lapu-Lapu City Division to participate in the 18th Philippine Robotics Olympiad on September 2 – 6, 2019 at SM North EDSA, Quezon City

D. ROBOT FOOTBALL CATEGORY

- a. **1st Place: Science and Technology Education Center High School**
 - i. Student: John Russel A. Jandonero
 - ii. Coach: Donald B. Dungog
 - iii. Principal: Rowena G. Sagarino
- b. **2nd Place: Science and Technology Education Center High School**
 - i. Student: Fritz Jovan U. Amores
 - ii. Coach: Joan M. Dungog
 - iii. Principal: Rowena G. Sagarino
- c. **3rd Place: Marigondon National High School**
 - i. Student: Carl Vincent Kho
 - ii. Student: Daryl M. Patigas
 - iii. Student: John Paul Patigas
 - iv. Coach: Mary Grace E. Agnes
 - v. Principal: Ricardo T. Cayacap
- d. **4th Place: Science and Technology Education Center High School**
 - i. Student: Bryner C. Javier
 - ii. Coach: Joan M. Dungog
 - iii. Principal: Rowena G. Sagarino

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DepEd, Division of Lapu-Lapu City





The Southern Insights

MNHS Robotics Team 3rd in Nationals

"We then noticed that the other robots' motions were like that of STEC, who gave us our first win, so this led to our winning streak." Carl Vincent Kho, with Daryl Patigas, said in an interview after bagging 3rd place in the 18th Philippine Robotics Olympiad held at SM North Edsa, Quezon City on September

completion, the Marigondon National High School Robotics team, consisting of Kho and Patigas, both grade 10 students, together with their coach Ms. Mary Grace Agnes, bested 10 participating schools in the Robot Soccer or Robot Football category.

They now qualify for the National Robotics team together with Claret School of Quezon City Team A, Science and Technology Education Center-High School, Claret School of Quezon City Team B and De La Salle University. STEC and MNHS were the only public schools among the 500 schools that joined this competition. The Team is now preparing for the upcoming 2019 World Robotics Olympiad which will take place in Győr, Hungary on 8th to 10th of November 2019. Over a hundred schools from around the world are expected to flock and compete in the said tournament.

Kho and Patigas have represented the school and country before, in the Pre-World Robotics Olympiad and World Robotics Olympiad held last year at Hoopsdome, Lapu-Lapu City.

Frenchie Napoles



Patigas and Kho with fellow delegates in Győr, Hungary.

2-6, 2019. Despite the fact that the team had to reprogram and change their robot the day before the

What's Inside

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100 Days Countdown: 100 Days Means 100 Days To Go

P7



The Gavia Effect: We are in Green Bangkok!

P10





The Journey

I was known for bringing the flag of the Philippines to the World Robotics Olympiad in Hungary. However, the challenges behind this success story was one that required a lot of convincing for financial support.

September 5, 2019. Hoops Dome Arena at Lapu-lapu City, Cebu. Where my body pumped enough adrenaline in my veins to overtake Lightning McQueen. The time where I led my team and my school from a 3-year, always-at-the-bottom-of-the-rankings losing streak, to a spot on the international stage.

I could already foresee our obvious loss against the likes of prestigious schools with the capability to provide gear and knowledge. So I did what any sane leader would do: I switched categories on a whim. Call it instinct, but I was tired of losing and craved for the thrill of new challenges. We broke down the robot we tried to perfect for a month, and, with our passion reignited, rebuilt it to fit a completely new world. 5 minutes to build and code on the spot for Robot Soccer. God favored us that day, as we won against the third placer due to an own goal.

Now, we move on to the national competition in Manila. Where, long story short, we were practically banned from playing. The parts used in our robots were compromises since our school was not financially capable enough to provide us with the proper sensor to detect the infrared ball. The sensor used, instead, was an ultrasonic sensor, one intended to supplement the robot's effectivity in scoring goals. Luckily, we made it into the semi-finals by manually coding the logic alone—without the appropriate sensor. Fortunately, on the day of the finals, one team who did not make it lent us the parts. We lost that year but it was a learning experience.

The following year, we continued the same path and thankfully made it to the nationals again. The only difference was, the community in Lapu-lapu lent us parts and we tapped into an engineer friend for guidance. He played a significant role in our success by introducing us to the PID Control System: a self-correcting algorithm. This sounds good, right? Wait 'till you realize it actually happened a few days before the actual national. I vividly remember the night before the competition proper, we, 2 timid grade 10 students, had to study a few college-level concepts to hone our bot even more. In the contest proper, we made a few friends in Manila and managed to land 3rd place, securing my team a spot in the finals.

Before the glorious nights in Europe, we were faced with yet another financial dilemma: the money needed to fund our flight and stay in Hungary. We knocked many doors, hoping for kind hearts to open up. It was a long, but rewarding journey. In the end, the mayor of Lapu-lapu City, Hon. Ahong Chan, came to our aid. A core memory that will forever inspire me and my team.





<http://felta.ph/2019/4th-lapu-lapu-robotics-cup-supported-by-hon-mayor-junard-ayong-chan/>
<https://www.facebook.com/carlvincen.kho/posts/2429121757201188>

