



IMC PROJECT BOOKLET

POPULARIZATION

As IMC we are trying to outreach so that FIRST values can reach more people. We continue to announce the name of FIRST on many social media platforms in order to make the robotics activities of young people spread throughout the world. In this process, we were able to give the opportunity to FIRST teams for having the necessary features, such as the robotic love and team spirit by the radio and television programs; for example, TRT GAP Radio and NTV Guzel Gunler Program, the social media accounts we are using actively. Also, we collaborated with Zemin İstanbul. We will continue our efforts in this way, to reach more people, and to spread STEM and FIRST, with our Hit The Road IMC project.

Özel yetenekliye eğitim desteği

Turkcell, Zeka Küpü projesi kapsamında 20 yılı aşkın süredir üstün ve özel yetenekli öğrencilerin eğitim gördüğü Türk Eğitim Vakfı İnanç Fırkeş Özel Lise-si'yle (TEVİTÖL) iş birliği yaptı. Geçen yıl "Zeka Küpü" projesiyle 7 bölge-deki BİLSEM'lerde okul sonrası eğitim gören özel yetenekli öğrenciler için teknoloji odaklı eğitim seferberliği başlatan Turkcell, bu seferberliğin bir sonraki adımı olarak projeyi TEVİTÖL'de hayata geçirdi.

daha iyi bir eğitim ortamı sağlayacak. Öğrenciler bu özel sınıfta hayata geçirmek istedikleri

fikirleri 3 boyutlu modellemeye tasarlayıp bir ürün olarak 3D yazıcıda üretebilecek.

'İcat çıkartan birey yetişiyor'

■ Türkiye'nin teknoloji üreten ülke olması için çalıştıklarını ifade eden Turkcell Genel Müdürü Kaan Terzioğlu, "Bu öğrenciler günümüz teknolojilerini programlamayı ve nasıl 'icat çıkartan' bireyler olacaklarını öğrenecekler. Ümit ederim ki Türkiye'nin dört bir yanında TEVİTÖL gibi okullar açılır" dedi.

300 TABLET VERDİ

TEVİTÖL'ün eğitim sürecinin Turkcell'in iletişim ve teknoloji gücüyle iyileştirilmesinin amaçlandığı projede Turkcell, Öğrencilerin teknolojiyi kullanarak daha üretken olması için

okula 20 bilgisayar, 3D printer, Arduino ile Maker malzemeleri ve akıllı tahtadan oluşan Zeka Küpü Teknoloji Laboratuvarı kurdu. Öğrencilerin teknolojik gelişmeleri yakından izlemesi için tüm öğrencilere 300 adet Turkcell T Tablet de dağıtıldı. ■ ARZU KURUM

TEKNOLOJİK SINIFLAR

TEVİTÖL'ün ve öğrencilerin tüm ihtiyacını karşılayacak olan şirket, proje dahilinde sınıfların içerisini mobilyadan teknolojik donanıma kadar yenileyerek



IMC IN THE PRESS

Turkcell'in 'Zeka Küpü' gençleri robot üretiyor

Turkcell, 'Zeka Küpü' projesi kapsamında özel yetenekli gençlerin eğitim aldığı TEVİTÖLE teknoloji desteği sağladı. Turkcell Genel Müdürü Kaan Terzioğlu, "Gelecekte yazılım, yapay zeka, artırılmış gerçeklik ve robot teknolojileri büyük önem kazanacak. Gençlerimiz, bu teknolojileri kullanarak insanlığa fayda sağlayacak birçok projeye imza atacak" dedi.



a. Printed Media

(Akşam, Aydınlık, Dünya, Habertürk, Hürses, Milliyet, Ortadoğu, Sabah, Star, Takvim, Türkiye, Vatan, Yeni Akit, Yeni Şafak, Adana Toros, Bursa Kent, Gaziantep Zafer, Gebze, Tokat Haber)

b. Social Media

(Youtube, Twitter -Celebrities&Our Profile-, Instagram -Celebrities&Our Profile-, Facebook -Our Page-, Pintaram, LinkedIn)

c. TV News

(NTV Güzel Günler, Different News)NTV NEWS , TGRT NEWS , 24 NEWS , CNN TÜRK NEWS , 24 NEWS 2 , ÜLKE NEWS , NTV NEWS 2 , NTV GÜZEL GÜNLER

d. Internet News (142 News)



IMC IN THE PRESS



e. Radio

(TRT GAP Radio) We have reached 15.872.127 people.

f. Zemin İstanbul

We collaborated with Zemin İstanbul and organized a webinar in which our team leaders and graduates shared their experiences. By collaborating with Zemin İstanbul, we reached more people and informed them about our experiences at IMC, FRC. Zemin İstanbul and we shared this webinar on different platforms.



ADVISOR IMC

a. FRC

- I. 56 teams assisted.
- II. 7 teams mentored.



b. FLL

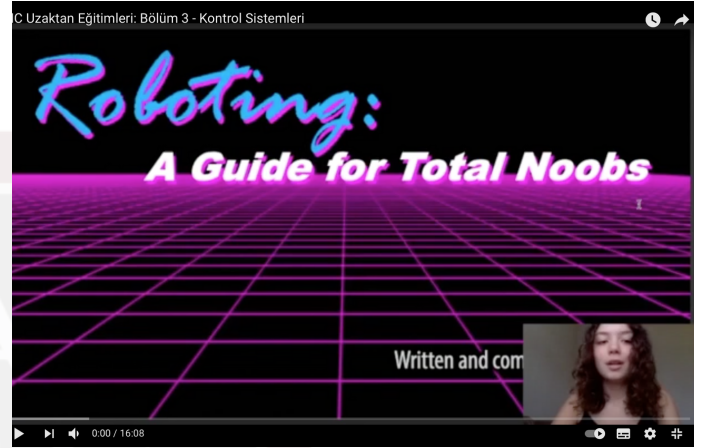
- I. 15 teams assisted.
- II. 4 teams formed.



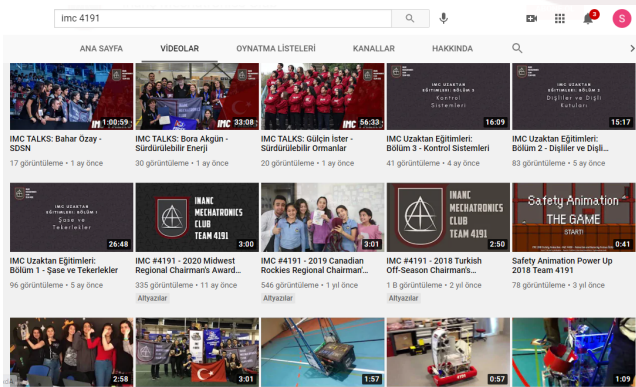
YOUTUBE

As IMC, we work to ensure that all teams have equal opportunities and equal competition between teams. We know that the important thing is not to win; learn and experience. We are happy to share our experiences and knowledge with other teams.

In this respect, we have provided robotics and programming lessons through our YouTube channel to facilitate and assist the work of the teams who have difficulty accessing certain resources.

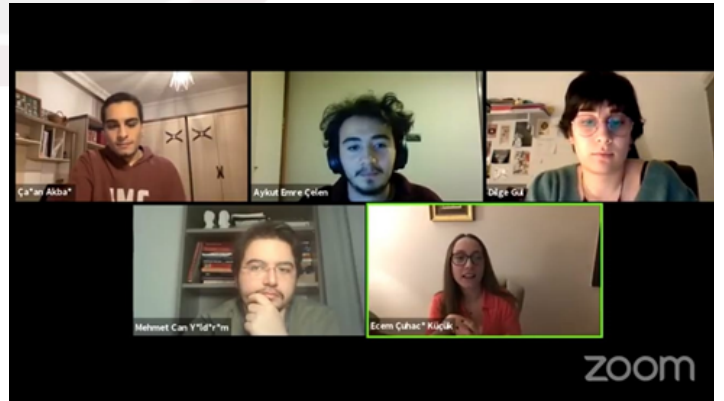


We achieved a total of 549 views with 5 different videos we shared and we reached many teams. In addition to these lessons, we also shared our Chairman Award videos, our responsive professionalism animations, our security animations, and our videos introducing our robots on YouTube, allowing other teams to access and benefit from our videos.



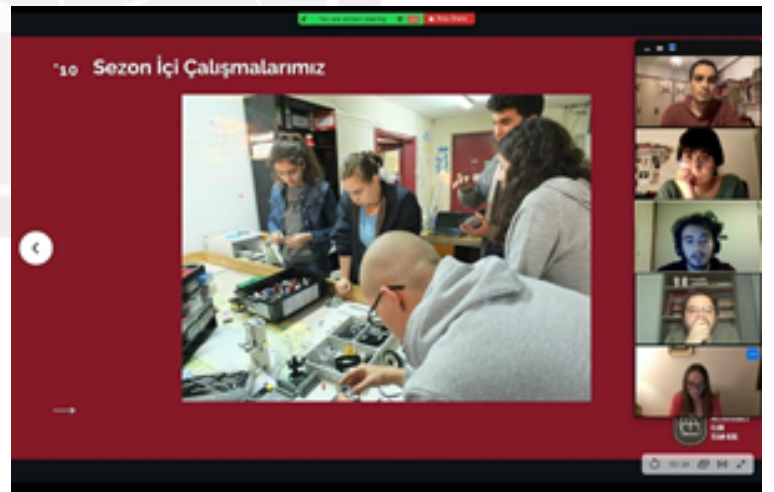
OUR ALUMNI/ VOLUNTEERS

The spirit of FIRST is not exclusive to our team; it is crucial for us to spread the spirit at our school and community. For this reason, we encourage our schoolmates and alumni to join the FIRST community by showing them the ways to volunteer and mentor. We tell them about the FIRST events in Turkey that are organized by the Fikret Yüksel Foundation, and their rights and responsibilities as participants. We have had many FYF volunteers from both the team and our school friends over the years, thanks to the promotions we made at the school. Once our members graduate they don't cut their ties with IMC, and always show their support to the new members. For instance, this year we organized a webinar with Zemin İstanbul, in which our alumni participated as speakers. They shared their experiences with the hopes of increasing the FIRST participation in Turkey.



ZEMİN İSTANBUL

In the webinar, we held jointly with Zemin İstanbul on Thursday, January 21 at 20:00, our two graduates and 2020-2021 team captains shared their IMC and FRC experiences under the moderation of Ms. Ecem from Zemin İstanbul. With this webinar, we aimed to inspire new teams by introducing the FIRST and show them the general system of IMC. We believe that the experiences of our alumni and captains guided those who are interested in robotics but don't know where to start. We aim to inspire more people in the future. To do so, we need to be known. With Zemin İstanbul, we reached more people. They shared our Webinar on their social media platforms (Youtube, Instagram, Facebook) and website.



YUVA

FOUNDATION

Unfortunately, not all children have the same level of education in our country. As IMC, we implemented the "Haydi Kızlar Kodluyoruz" project in order to take attention to equal opportunities and to ensure equal opportunities as much as we can. We came together with Syrian refugee girls together with the Yuva Foundation, which we worked together on this project. By introducing them to robotics and coding, we tried to support them to take perhaps the smallest but most important step in their lives. In addition, we spent a day with Syrian girls with games and workshops that would instill the values of FIRST, called "Building a Mars Colony", "My Dream Robot", and instilling an effective and friendly competition, and the awareness of being a team. With this project, we drew attention to equal opportunities. We also tried to inspire dozens of girls to take the first step they can take in their engineering lives.



HIT THE ROAD IMC

a. 46 Cities

Kocaeli, İstanbul, Bolu, Giresun, Diyarbakır, Antalya, Diyarbakır, Balıkesir, Adana, Aydın, Zonguldak, Tokat, Mersin, Uşak, Tekirdağ, Bursa, Sakarya, Elazığ, Malatya, Sinop, Gaziantep, Muğla, Kars, Adıyaman, Ankara, Kütahya, Kayseri, Denizli, Manisa, Bayburt, Rize, Tunceli, Kırşehir, Edirne, Karaman, Hatay, Kırklareli, Çanakkale, Sivas, Düzce, Burdur, Kastamonu, Bitlis, İzmir, Eskişehir, Yalova

b. 20 Countries

Turkey, USA, Nepal, Japan, China, Mexico, Denmark, Germany, France, Australia, Syria, Iran, Russia, Canada, Ermenia, India, Israel, Norway, Italy, Holland.



c. 5 Continents

Europe, Asia, North America, South America, Oceania.

These are the numbers of the places we made innovative and interactive presentations and met 14.023 people including children and teenagers who are interested in robotics.

HIT THE ROAD IMC

As IMC, our goal is to minimize the differences caused by the inequality of opportunities between our peers. For this reason, we visit schools in regions that do not have the proper conditions, and we tell them about robotics and organize various activities. In this way, we introduce them to the FIRST Foundation and FIRST contests. As part of this project, we went to Diyarbakır in February 2018, Giresun in February 2019, and Sinop in February 2020. We totally visited 15 schools and introduced the FIRST Foundation and FIRST principles to nearly 3500 students, more than half of them were girls.



We organized entertaining workshops and introduced them to robotics, and we also showed that girls could also be successful as much as men in this game. Within the scope of one of the workshops we organized, we let the children design their dream robots by using their creativity and build their designs by using LEGO sets. In addition, with the “Longest Tower” event, we wanted students to build their towers in the most efficient way by drawing attention to the requirements of teamwork. Apart from these, we have taught programming to the students in a fun way with our “EV3 Programming” workshops.



HIT THE ROAD IMC

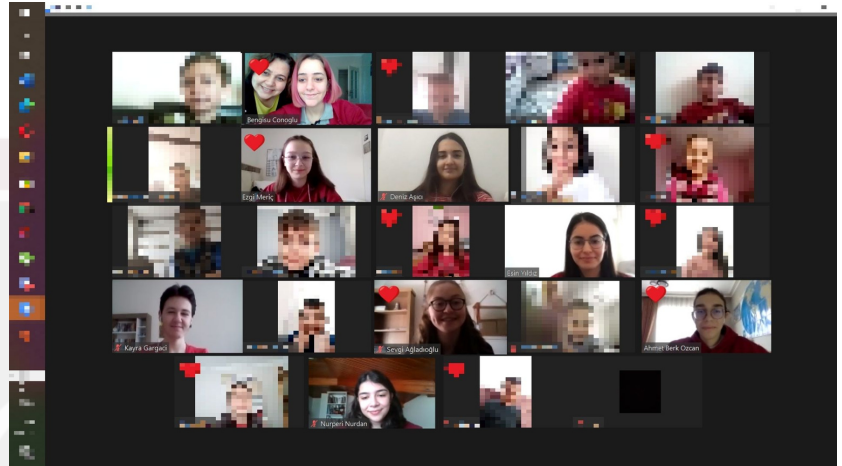
We visited Sinop province which is the northernmost part of our country this year. During this visit, we instilled FIRST values in village schools and schools where children with limited opportunities were educated and created STEM camps. As a result of one-to-one and group training with more than 300 students, we have opened 1 FLL team. We informed and developed children interested in robotics. We are not only limited to our own country, but also in the schools in Armenia, China, and in school that our school works together with Erasmus + projects, we are spreading FIRST values and building teams.



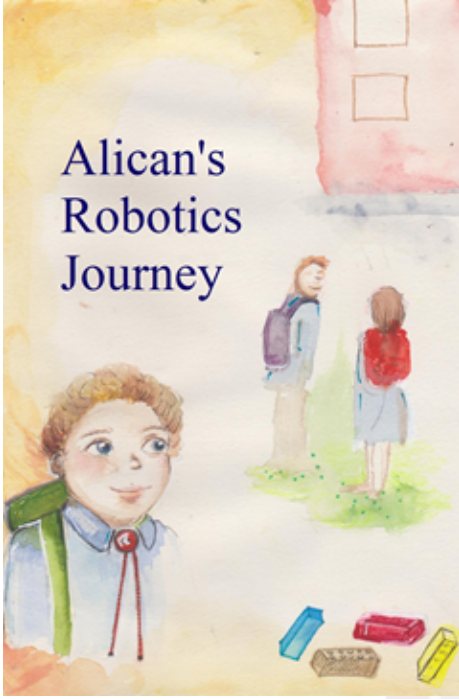
In the summer of 2017, we designed a website where students in China could access robotic and programming resources that they could not reach because of internet restrictions in the country. Our school carries out many Erasmus + projects with schools in Germany, Austria and Denmark. We talked to the teachers in these schools about FIRST and then wanted to set up FRC teams in their schools and invited us to their country. Although we could not go to their countries because of financial reasons, we have not lost our contact and continue to help them away from teaming up.

HIT THE ROAD IMC: ONLINE

As a team that adapts all the activities we do to online platforms in these challenging times, we also carried our "Hit the Road" project to the online platforms. For this purpose, we came together with more than 20 students over Zoom, and managed to spread awareness about STEM fields including robotics in a joyful manner to these students. During this interaction, we made the students use their problem-solving skills and thinking skills with the activities we worked on and they had a productive day. In addition we wanted to show that "How a basic code works and what are the main elements of coding a product?" In this way, we wanted to be an inspiration and different perspective for their life.

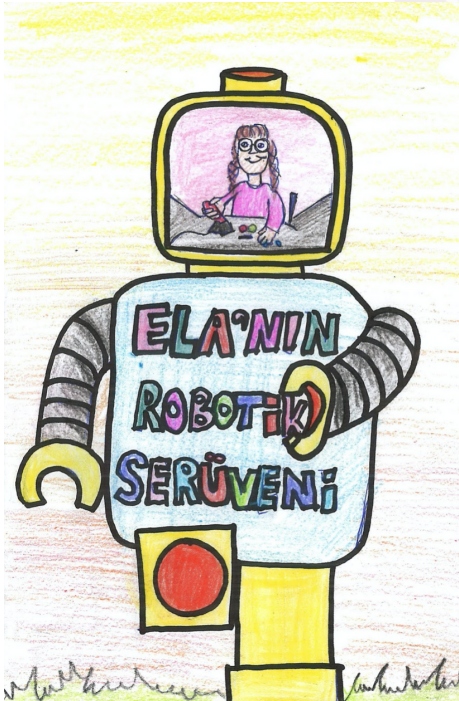


ELA & ALICAN



As IMC, we wrote two books called; “Alican’s Robotics Journey” and “Ela’s Robotics Journey”. In “Alican’s Robotics Journey”, our hero Alican is a little boy who has interest in robotics and technology. The theme is that Alican wants to form a robotics club in his school. With the help of his friends and family he forms the team.

After the “Alican’s Robotics Journey”, we wanted to put more emphasis on gender equation, hence we retold the story as “Ela’s Robotics Journey”. In this version, Ela wants to form a robotics club; but since she is a girl, people do not let her run for her dreams. Her family wants Ela to be a doctor, not an engineer. All due to this pressure, she competes in the league and becomes successful.



As IMC we inspired many children. We have contacted UNICEF foundations in 86 different parts of the world. We also agreed with UNICEF Kazakhstan to distribute our books in their countries and to cover the cost of printing. Also since as a team we care about equality without any limits, for people with sight disabilities; we recorded our book into an audible. As IMC, we see people’s problems and focus on solving them everyday, and we will not give up.

MAKER FAIR

As IMC, we participate in & organize various activities and events to spread robotics and support the development of STEM in our country. Istanbul Maker Faire is just one of those events. Our team has been attending this event for 3 years. In 2016, IMC took over the organization of the event and added one of the activities it does to spread the technology. There, to inspire people by introducing FIRST and FRC and adding young people to the FIRST family has always been our primary goal. We took our robot that we built and participated in competitions there too. In these events, we had the opportunity to meet many children and adults related to robotics. The students of a refugee school came to meet us in particular and decided to set up an FLL team at their school!



TURKCELL ZEKA KUPU WORKSHOP

As IMC, we organized weekly “Arduino Robotics Coding”, “Android App Programming” and “Web Site Designing” workshops with our former sponsor Turkcell in 2016-2017 and 2017-2018 seasons. By reaching more than 80 students, we taught programming to each of the 3 students of 4 in our school. After the workshops, we got very pleasing feedback about how the workshops were entertaining and informing at the same time.



ERASMUS +

One of the biggest problems that our team has seen in the FRC community is that the FRC is not common enough in Europe and there are only two regional arrangements in Europe. Hence, we are trying to reach students and teachers from many countries, we tell them about FIRST to widen the community. One of the things we did was to present FIRST, FLL and FRC to teachers from Denmark, Italy, France and Germany. Teachers were very interested in FIRST and what IMC had done, also stated they wanted to set up a team. FIRST inspired them so much that the teachers we have contacted from Denmark have invited us to Denmark to establish a FLL team in their schools! Although financial difficulties have prevented us from doing so, our communication is still continuing. In Erasmus + projects where our school will be participating in the coming periods, we are planning to talk about the programs organized by FIRST with other participant students and establish teams in their schools.

KICK OFF

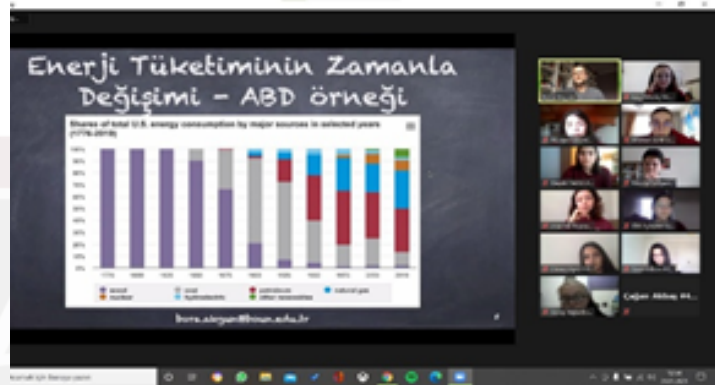
As the Inanc Mechatronics Club, we realized that we had to start the season with a fresh and clean start for a good build season. Since the FRC community is not as crowded as it is around the world in Turkey; we, Inanc Mechatronics Club, thought that we should assist the Fikret Yuksel Foundation both economically and morally. Thus in 2016, in the Stronghold Season, we organised the 2016 Kick-Off for the Turkish FRC teams!



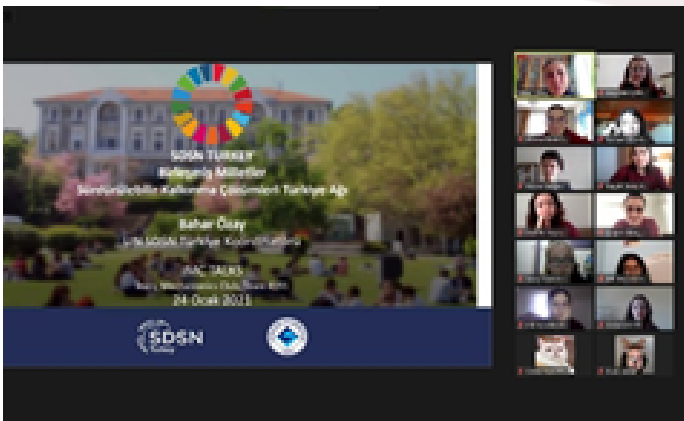
IMC TALKS

As IMC, we are aware of the pollution in the world. To inform more people about sustainability, we organized a conference named IMC Talks. We invited Gülçin İster -a successful business EHS Manager and a woman engineer in International Paper company- and we were informed about sustainability forest to deforestation for producing paper and paper products with Gülçin İster.

The second speaker - Bora Akgün- is a physics academician at Boğaziçi University. Also, he worked in CERN for many years as a physicist.



We were informed about sustainable energy. The last speaker -Bahar Özbay- is representative of UN SDSN Turkey. We were informed about sustainability in general terms, and we discussed 17 different SDSN goals at our conference to provide information about areas of extension. We reached 55 people around Turkey. In favor of speakers, we could reach out to people and raise awareness about sustainability with several topics. Thorough, we could share consciousness with many different people under FIRST goals and a new liveable world.



CARBON FOOTPRINT

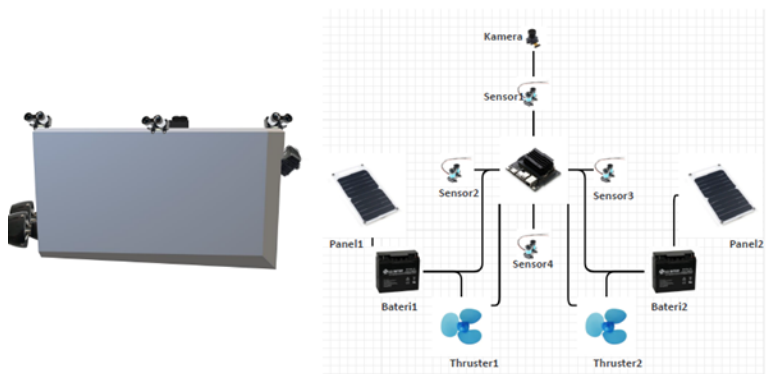
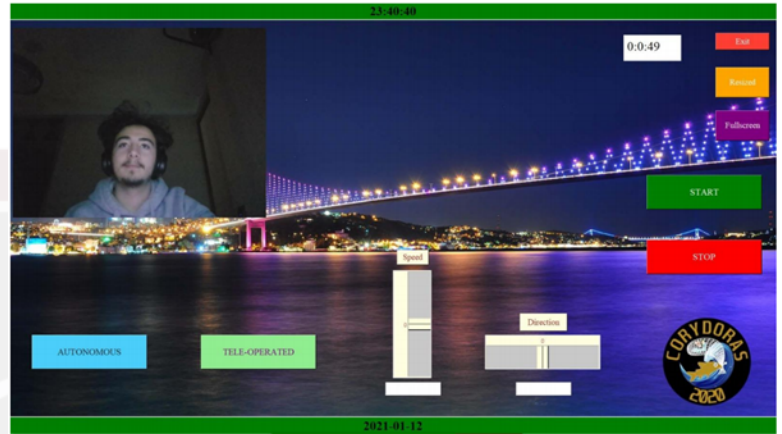
Technology is now a solution to sustainability problems and public health issues. Since FRC teams consume too much energy and produce a high amount of CO₂ emission during seasons, we aimed to create awareness and take the necessary precautions for the FRC family with our Carbon Footprint Project. We calculated 116 national and global FRC teams' carbon footprint around the world such as USA, Canada, Mexico, Israel etc.; and informed them about their carbon emissions and assisted them with the possible solutions aiming to reduce emissions. Also, we informed our sponsors too. We sent emails about their carbon footprint and advised possible ways to reduce it.

Finally, we contributed new trees to our FRC forest on our school campus by planting trees for each team that participated in our project. Since the love of nature should be given at early ages, we focused on raising little children's awareness by creating an app on growing trees. We contacted 8 nurseries to promote taking care of trees while having fun by using our app.



CORYDORAS

Water pollution is one of the pollution that has increased considerably today, as a result of the developing world and industrial movements. We noticed the sea located near to our school contaminated as a result of industrial action and we have embarked to find a solution to it. In the context of this solution, robotics members of our club started to carry out a project called by Corydoras under the mentorship of two senior students studying at the Department of Mechatronics Engineering at Turkish German University. The study that they are conducting consists of two different mechanisms, one of them collects and sorts the waste in the sea, the other one collects the waste by swimming and the other separates the transferred waste. The work that was done by the robotics members of our club so far of this project is below.



SUSTAINABILITY

As IMC, we are aware of the pollution and waste of natural resources in the world. We have made a booklet about sustainability to inform the companies with which we have relationships. On the booklet's coattails, we reached out to various people and companies. These companies raised awareness of sustainability after we contacted them. In addition, they have informed us that they will be more careful about sustainability. In this way, the companies became more aware of sustainability.



İÇİNDEKİLER

SDSN.....	1
IMC TALKS.....	2
HIT THE ROAD.....	3
ALİCAN VE ELA.....	4
KARBON AYAK İZİ.....	5
DEPREM ROBOTU.....	6
IMCHINA.....	7
TOHUMLU KALEM.....	8
HAYDİ KIZLAR KODLUYORUZ.....	9

EXCESS FOOD

Not only the contestants but many volunteers, jury, audience, and guests attend the robotics competitions every year. In this process, while eating the dishes given to us, we forget the value we need to give to nature and about 400 kg of food per person every year goes to the trash. During these competitions and events, we gathered the untapped and untouched dishes with the containers we put in various places of the activity area and brought them to the people and shelters who needed it. We have not forgotten the needy in the field of robotics and we have provided assistance to them through FRC.



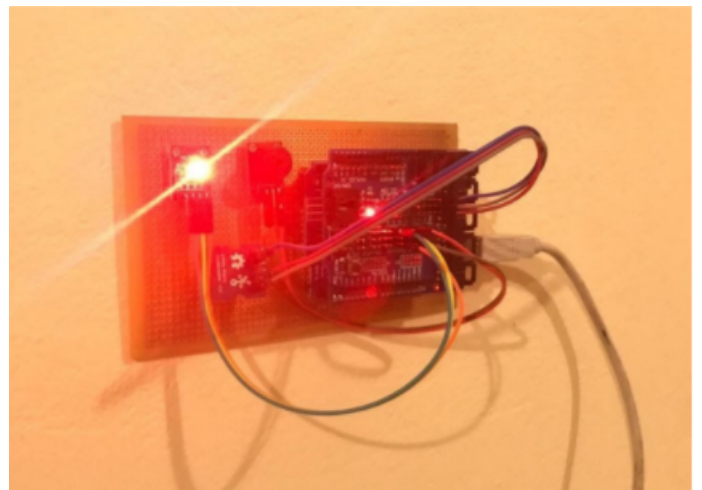
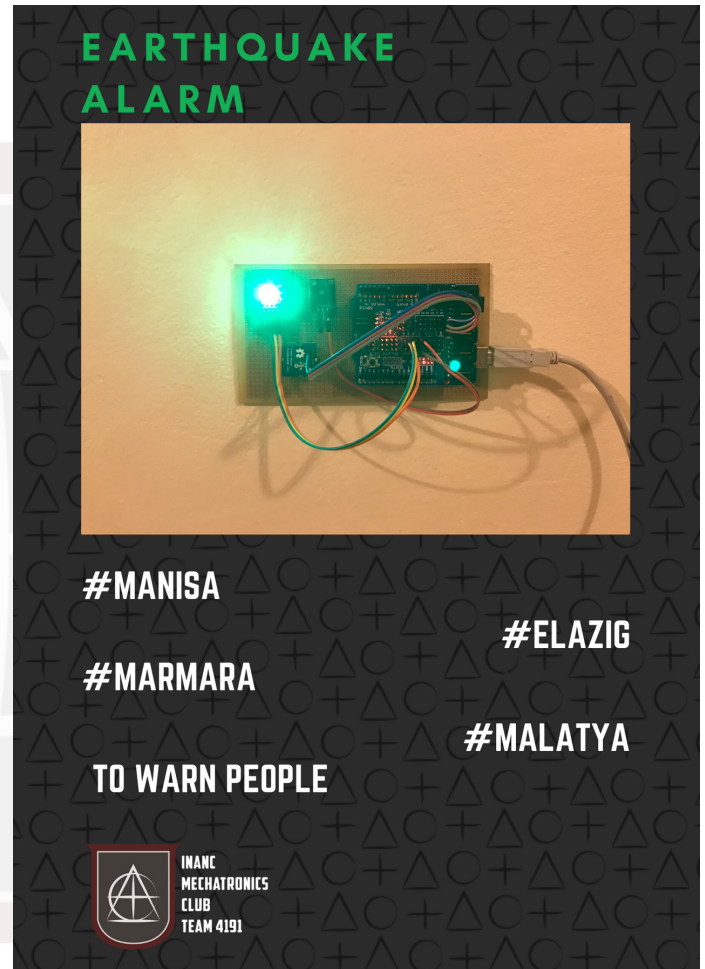
UN SDSN

Since sustainability is one of the main topics in the UN, we contacted a Turkish UN ambassador Bahar Özay, introduced her FIRST. As the Turkish representative of the UN SDSN Youth, we aim to embrace a sustainable life with the recognition of 17 SDGs. We are currently working on opening an SDSN Club at our school, which will create projects in order to achieve the 17 SDGs.



EARTHQUAKE ALARM

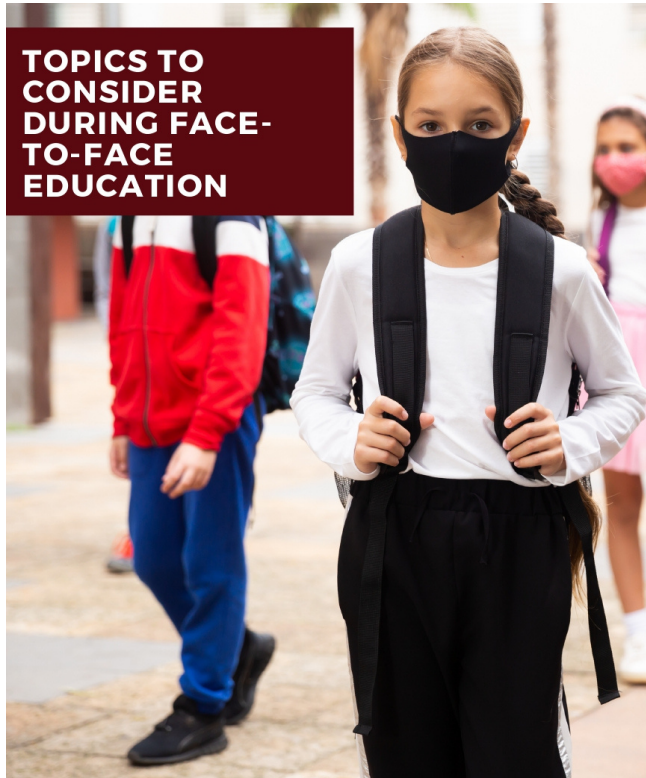
Turkey is a country with a high earthquake risk due to its geographical location. The earthquakes that took place in many different cities recently, especially the Elazığ earthquake, deeply upset and affected us. So we thought about how we could reduce the negative effects of earthquakes and save people's lives. After days of continuous work and trials, we have created an earthquake alarm robot that alerts people at the time of an earthquake and works by triggering seismic waves. We are actively using our robot at our school in Gebze, an earthquake zone, and our goal is to replicate the robot and save as many lives as possible.



FACE-TO-FACE EDUCATION BOOKLET

In the face-to-face education booklet we explained how face-to-face education is affected by COVID-19, the problems that online education has brought and how to solve them. We analyzed all the possible issues and suggested solutions for each one of them. For instance physical activity levels have dropped because of quarantine. In order to prevent the negative effects of this we offered alternative activities that every student can do at home. Additionally we touched upon the precautions that students should take in case schools go back to face-to face education during the pandemic.

TOPICS TO CONSIDER DURING FACE- TO-FACE EDUCATION



INMC
MECHATRONICS
CLUB
TEAM 4191

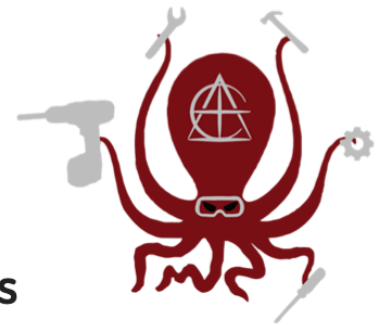
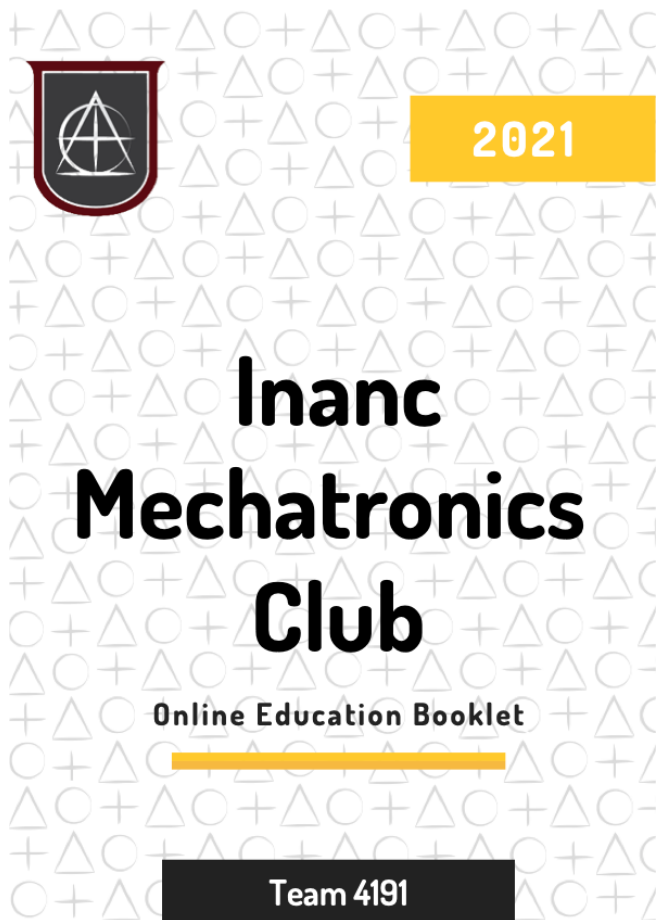
TABLE OF CONTENTS

- STUDENTS' HYGIENE
- EXAM PROCESS
- SCHOOL ENVIRONMENT
- BOARDING SCHOOLS
- MENTAL HEALTH
- IN CASE OF SYMPTOMS



ONLINE EDUCATION BOOKLET

Because of COVID-19, Turkey had to continue its education online like many other countries. We were away from our friends because of the restrictions which resulted in us losing motivation. We prepared a booklet to boost every student's motivation. Apart from the motivation problems, physical problems started to occur as students' screen time increased during the online education process and stated the solutions to these problems in the booklet.



Contents

- 03 Positive Aspects of
Online Education and
Related Advice
- 04 Negative Aspects of
Online Education and
Related Advice
- 05 What Can Be Done to Make
Online Education More Fun?

Team 4191

IMCHINA

As IMC, we are proud that we became a part of Turkey All-Star team at the China Robotics Challenge (CRC) that was held in China, summer of 2017. As the Turkey All-Star team, which we became a member by the invitation of the Fikret Yüksel Foundation, we met with several Chinese teams and made friends. With the observations we did, we found out that the Chinese teams did not have the ability to reach some crucial information which will help them spread the FIRST, which is a really new trend on Far-East, amongst their country; because of the government's internet restrictions. Hence, we created a website which includes everything that a team needs to know to form a FRC team, from how to code to, how to find sponsors; also this website can be displayed in China, even with their restrictions. Chinese Government also has a proxy for the Youtube, so we uploaded our classes on Youtube to their own video sharing platform, Bili Bili.

