THE MARYELS A ROBOTICS INITIATIVE FOR A NEW GENERATION OF OUR MUSLIM YOUTH

Dr. Mohamed Ebeida

A research scientist and the head coach of The Marvels - Champions of NM regionals



DR. MOHAMED EBEIDA WWW.MSEBEIDA.NET



- ▶ Born in Alexandria, Egypt. Came to the U.S. in 2005.
- A research scientist at Sandia National Laboratories since 2010.
- ▶ PhD in Aeronautical Eng. (UC Davis), 2008.
- MSc In Applied Math (UC Davis), 2009.
- Postdoctoral fellow at Carnegie Mellon university (2008 – 2010).
- ► 50+ publications, sole inventor on 4 patents.
- Founded a robotics program at the Islamic Center of New Mexico. Formed several award-winning Muslim teams in international competitions

RAISING A GENERATION OF PROUD CAPABLE MUSLIMS THAT RECOVER THE LEADERSHIP ROLE OF THE ISLAMIC CIVILIZATION

Common Struggles our youth face in the USA:

- ► Enormous peer pressure from non-Muslims.
- False notion that Islam is about performing rituals with little implication on one's career.
- Negative media coverage about Islam and Muslims.
- False notion that Muslims are behind in terms of civilization and world leadership.
- \rightarrow This led to an Identity Crisis:

Many of our youth act as Muslims only in the masjid and hide their Islamic identity somehow outside of it!

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Struggles to Strengths isA

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In this program, we work on providing solutions for these challenges and providing a path towards restoring the leadership of the Islamic civilization isA.

We need to create a network to connect our Muslim Youth all over the world ... That should be easy using today's technology

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Many of our youth act as Muslims only in the masjid and hide their Islamic identity somehow outside of it! The Islamic civilization led the world for the past 1200/1400 years! Even today a very large number of Muslim Scientists are solving problems in a creative way making a huge impact on humans' way of life!

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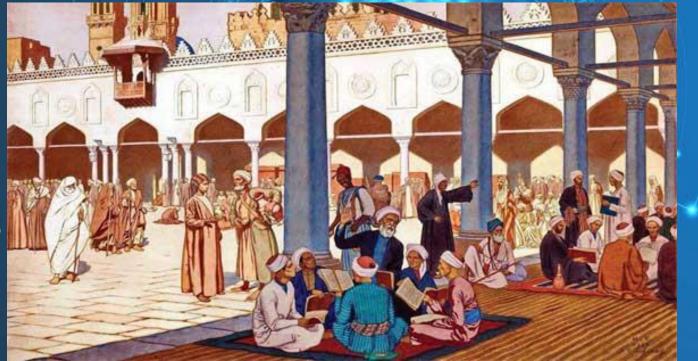
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Many of our youth act as Muslims only in the masjid and hide their Islamic identity somehow outside of it! A Muslim husband-and-wife team of researchers: Ugur Sahin, 55, and Ozlem Tureci, 53 Saved the world from Corona Virus

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Struggles to Strengths isA

- In order to solve all these problems and raise a capable generation of proud Muslims we need to restore the universal role of the "Masjid"
- Like the old days:
 - Our Muslim kids should find **answers** to the questions they have in the masjid.
 - They should learn how to develop their careers the Islamic way in the masjid.
 - They need to see the impact of the masjid on their daily life!



Educational circles in masajid used to provide a direct mentorship between the students and their teacher!







ration is open until classes are ful Space is very limited, first come first serve Do you want to put your kids on the path toward

utorials for beginner





the best education possible

ICNM in collaboration with Salam Academy is happy to announce the launch of this 12 week program that will help achieving that goal isA O Week 1-4 Week 5-12

one of the highest paying jobs in the nation?

Opened to all ICNM kids Based on passing a test at the end of week 4 age: 7-14 Programming with Graphics · Basics of programming and Games using blocks • Fees: \$10 / kid • Fees: \$40 / kid

Where: Salam Academy /hen: Every Saturday starting Jan 25th with two options 12:00 - 2:00 pm and 3:00 - 5:00 pm Nant to register your kids; fill a form or send an email to msebeida@gmail.com

OUR MUSLIM YOUTH

RAISING A GENERATION OF PROUD CAPABLE MUSLIMS THAT **RECOVER THE LEADERSHIP ROLE OF THE ISLAMIC CIVILIZATION**

> **Words into Actions** Islamic Center of New Mexico (2012 – 2021)



I have been studying how to increase the impact of the masjid on our kids since 2012 in different capacities (Sunday School coordinator, director of youth, founder of multiple STEM programs, programming/coding instructor, etc.)

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COME LEARN ABOUT THE SCHOOL'S

Islamic Center of New Mexico 1100 Yale Bhd SE, Albuquerque, NM 87106 SALAM Academy 8015 Mountain Road Place NE, Albuquerque, NM 87110



In 2016 we founded Ibn-Sina Mind-Crafters School at ICNM to teach our Muslim kids the basics of robotics in the masjid!



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Programming * Robotics * Graphics

odin

Hadith



Quran * Arabic * Islamic Manners Sunday School قرآن کرم * لغة عربية * آداب إسلامية

A New Collaborative Education Program at ICNM Schedule: Sundays from 10:00 am to 2:00 pm (@ICNM) Admission Test and Meet your Teacher Day: Sunday 08/07/2016 Start: Sunday 08/14/2016 End: Sunday12/11/2016 Registration fees:

Early bird\$60/student (by July 31, 2016),Regular:\$75/student (by Admission test day)Late:\$90/student (afterwards)

Age Group: 3+

To register, please contact the School Principal.

Sr. Wesam Radwan (505-515-7456)



Islamic Center of New Mexico 1100 Yale Blvd SE, Albuquerque, NM 87106

We even added programming into the Sunday School Curriculum

Both Teams won top awards in NM qualifiers then NM Championship

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In 2016, we formed two teams and participated in the international competition of First Lego League (Age: 9 – 14)

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Our Muslim teams got invited to an international competition organized by NASA and we won the core-value award

Islamic Center kids, Sandia coach, win big in STEM competition

they could, "Our

Mohamed said."

we technology, engineering, and math) applications, Mohamed a (1441) initiated a robotics program last year at the Islan NM) for boys and girls six to 14 years old. Earlier this July, two teams of six children from the program were tional teams chosen to compete in a NASA-orgaized First Lego League (FLL) tournament in West Virginia. One of the aspiration Core Value award, a major prize involworking together in a helpful spirit. (See photo at right of Mohamed with his award-winning team)."

"This kind of success is great insulation for the kids from all the issues they face in public school," Mohamed says. "By the time they reach the e when other teenagers are causing trouble, these kids will be getting licon Valley. These kids now feel they are special." This year, the FLL theme - "Animal Allies" - involved progra ming Lego robots built by the contestants to collect and distribute food

Mileposts

to the international tournament in West Vi " says Mohamed. "Multiple Sandians h "Our program is open to everyone, to me and want their kids to join. The goal is diversity and getting kids excited about STEM.

nals according to their type. Each team got 2.5 minutes to finish

and achieved multion for more than a year and a half, an

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Our great accomplishment was cheered by the press and NM politicians in Congress. Our kids got invited to present robotics workshops for gifted students in top public schools.







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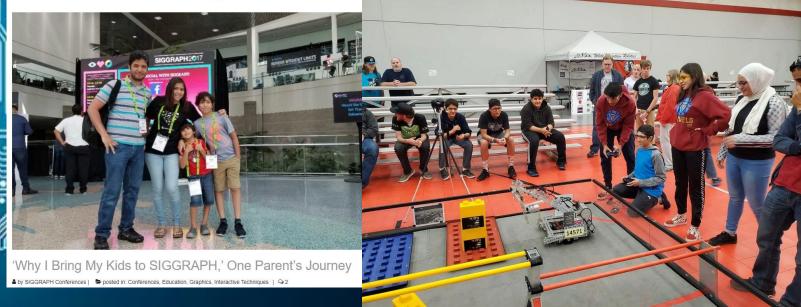
In 2018, we decided to take it to the next level and formed a First Tech Challenge (FTC) Team. Our team was able to win 5 awards in the first season!



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In 2019, Our team won the inspire award in the Sandia qualifiers and added 4 more trophies and competed in 3 States. We were featured in the SIGGRAPH (top conference in in computer graphics) blog.

ZOOM MEETINGS IT IS!

We were able to organize and nost several zoom meetings with each of these groups, where we described our team history, our current robot, and the efforts fut into framenising our team, algoristic learned about their group and set how we can help them start their gunn team. These sessions were all about torming a connection and getting ready for more meetings.



GOING LIVE WITH FACEBOOK INFLUENCERS!

DATED ON THE MANY ZOOM CALLS WE WERE

HOSTING FOR GROUPS ALL AROUND THE WORLD, RAMZY ABBELAZIZ AND THE EDUCATION CLINIC REQUESTED TO HOST A FACEBOOK LIVE WITH OVE TEAM. ECSTATIC OVE TEAM QUICKLY AREAMCED A

DATE AND CREATED FLYERS FOR DR. ABDELAZIZ'S

PEOPLE FROM 2) DIFFERENT

THE MARVELS

FACEBOOK GROUP

NOVIRIES ABOUT

COMMUNITY

OPEN FOR

TEAM TO COMMERCIALIZE. THE LIVE WAS VIEWED BY **ZOK PEOPLE.** AND WATCHED ACTIVELY BI

LONGER ONLY A

ROBOTICS COMPETITION

R OUR TEAM; IT BECAME

A STEM AWARENESS

MOVEMENT

FTC #14571

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In 2020, We started a world-wide Stem awareness movement. Our team was able to win the Championship of NM regionals (included top teams from Mexico) and qualify to world Championship.



COU	NTRIES FROM WHICH	H 73	HE LIVE EVENT	WAS	VIEWED:
	EGYPT =		CANADA .		IRAG =
	MOROCCO		ALGERIA		INDIA -
	PALESTINE		LIBYA		LIBERIA
	BANGLADESH		JAPAN .		FRANCE
	SAUDI ARABIA	1-	U.A.E.		TURKEY .
	MALAYSIA		TUNISIA 0		AUSTRIA 🚍
	AMERICA		GERMANY	- 1	FINLAND

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2.0x

1.9x

Our Proposal: Form new Muslim Teams to participate in FIRST International Competitions



Positive impacts are evidents. Positive impacts are evident for all *FIRST* students regardless of race, gender, income. or community type.

Knowledge

Identity

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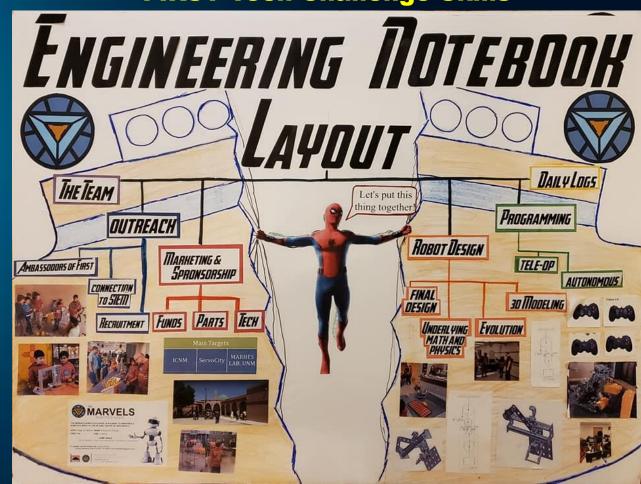


▶ We will seed our initiative with one team in the First Tech challenge competition.

- > As we inspire and train more coaches to join, we will expand the program to all levels.
- ▶ I am expecting, in a few years, this program will be like a mini-university inside our masjid isA.

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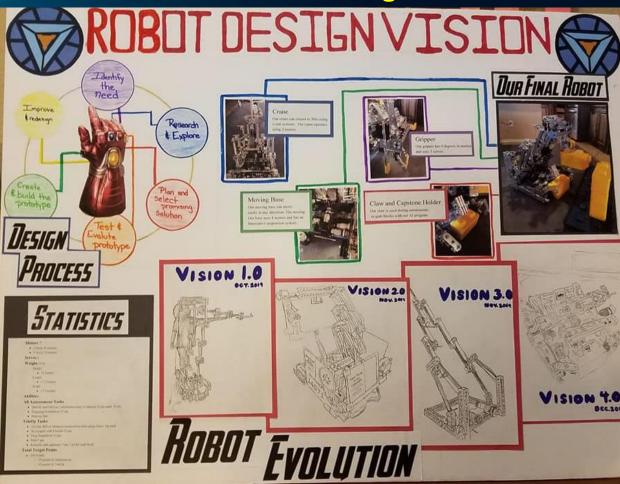
FIRST Tech Challenge Skills



Engineering Notebook

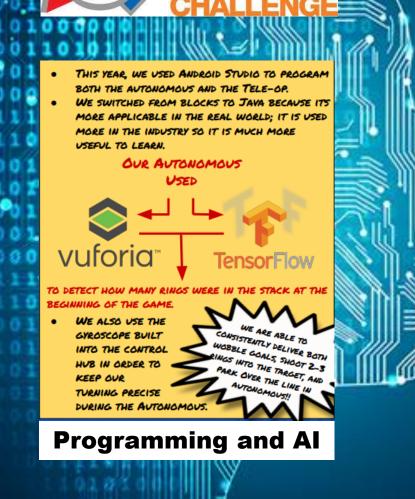
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FIRST Tech Challenge Skills



Robot Design

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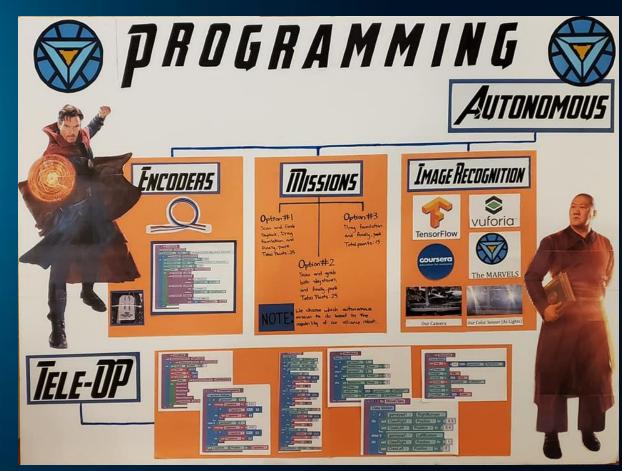


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FIRST Tech Challenge Skills



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FIRST Tech Challenge Skills



*Please note that the Arm was removed from this module to show more detail in our model; our current arm can be viewed in the previous slide

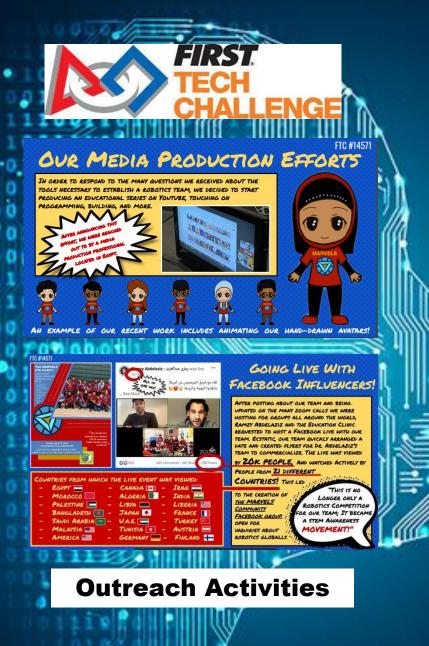
3D Modeling

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FIRST Tech Challenge Skills



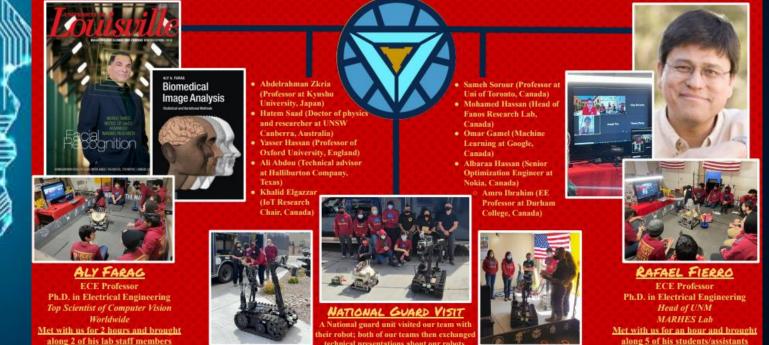




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FIRST Tech Challenge Skills

CONNECTING TO STEM PROFESSIONALS



RAISING A GENERATION OF PROUD CAPABLE MUSLIMS THAT RECOVER THE LEADERSHIP ROLE OF THE ISLAMIC CIVILIZATION

FIRST Tech Challenge Skills



Sandia Labs hosts family day

FIRS

Public Speaking









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Next Steps

- Interview interested students. Each candidate is required to provide a paragraph about why they should be selected as a MARVELS team member.
- Select team members.
- Pick a Team Captain, a Treasurer, and a Media Officer.
- Choose sub-teams and start preparing for an awesome season.
- Train more coaches and expand the program isA.

THANK YOU FOR YOUR TIME!



Questions?