

## March 2020

The Automation Zone was a themed zone supported by SFI. There were six engineers taking part in the zone:

- Tiziana Margaria is Professor of Software Systems at the University of Limerick
- Ruairi Williamson uses sensors and software to predict breakdowns for an electrical and electronic engineering company
- Ollie Otter, the winner of the Automation Zone, is a PhD researcher testing a replica of a floating wind turbine to see how it will perform at sea
- Nessan Harpur is a Customer Manager for the consulting company Trek10
- Mahnaz Rashedi is an Electrical Engineer at Finning UK & Ireland - Power Systems
- Anna Zakrzewska works to better automate communication networks at Nokia Bell Labs

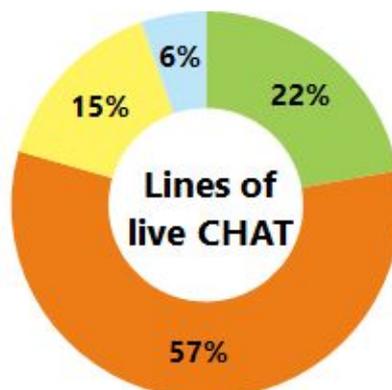
### Key figures

This zone was the busiest zone in March 2020. It had the highest number of live chats, and also the busiest chats out of all the March 2020 zones. It had the highest number of questions asked and approved out of all three zones. There was also the highest number of votes in this zone.

In response to coronavirus, Ireland announced on the final Thursday of the event that all schools would close from that evening. We decided to finish the event and announce the winners a day early. We ran chats that were booked on the final day if teachers requested, so that students could log in from home, as well as the open live chats, however fewer students were able to join than had previously.

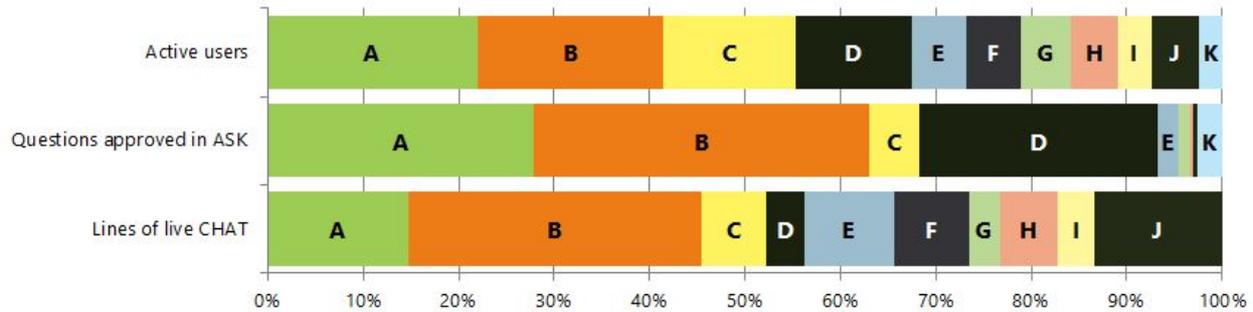
	AUTOMATION ZONE	MAR '20 ZONES AVERAGE	2012-19 ZONES AVERAGE
Schools	11	9	10
Students logged in	283	279	292
% of students active in ASK, CHAT, VOTE, or comments	87%	80%	83%
Questions asked	652	478	460
Questions approved	265	215	221
Answers given	314	395	420
Comments	63	58	45
Votes	163	146	211
Live chats	16	13	14
Lines of live chat	4282	3283	3,576
Average lines per chat	268	244	248

### Engineer activity



Engineer	PLACE
Ollie Otter	1st
Anna Zakrzewska	2nd
Mahnaz Rashedi	3rd
Ruairi Williamson	4th
Tiziana Margaria	5th
Nessan Harpur	6th

## School activity



	YEAR GROUP(S)	CLASSES
<b>A</b> St Colmans Clara National School, Kilkenny	5th Class, 6th Class	2
<b>B</b> St Pius X National School, Dublin (U)	5th Class	2
<b>C</b> Community College Dunshaughlin, Meath (U)	1st Year, 3rd Year	2
<b>D</b> Cabra Community College, Dublin (WP/U)	2nd Year	2
<b>E</b> Clouna National School, Clare (U)	5th Class, 6th Class	2
<b>F</b> Moneystown National School, Wicklow (U)	5th Class, 6th Class	1
<b>G</b> Brierhill School, Galway	4th Class, 5th Class, 6th Class	3
<b>H</b> Deravoy National School, Monaghan (WP/U)	4th Class, 5th Class, 6th Class	1
<b>I</b> Carndonagh Community School, Donegal (WP/U)	1st Year	3
<b>J</b> Our Lady Queen Of Apostles, Dublin (WP/U)	4th Class	4
<b>K</b> Colaiste Cholmcille, Galway (WP)	Transition Year	1

We try to reach schools that are less likely to receive visits and benefit from other engagement activities. Find out what we mean by under-served SFI target schools (U) and Delivering Equality of Opportunity in Schools (DEIS), and how you can support us in working with these at [about.imascientist.ie/2016/widening-participation](http://about.imascientist.ie/2016/widening-participation)

## Popular topics

Discussions in the Automation Zone were on topic, focussing on the use of robots and programming. Like all the zones, many questions were also about coronavirus, especially about school closures.

They asked Anna a lot about her experiences working abroad, such as what was her favourite part about working in Japan, as well as her current work at Nokia Bell.

Many questions were asked about the engineers current projects, and what problems they encountered. One school was doing a project on graphene, so many students asked questions about this.

Engineers were also asked about what they liked to do in their spare time, about what music they enjoy, and discussed any instruments they play.



## Examples of good engagement

One school was doing a school project on graphene, for which they had a stand at Royal Dublin Society Arena for Science Blast. This was a common topic in ASK and in the school's chats, and the engineers really valued the students activity and interests:

*"Have you heard of graphene?????" - Student*

*"Yes" - Anna, Engineer*

*"Oh cool we did a project on it for science blast" - Student*

*"What did you do?" - Anna, Engineer*

*"me and my class did a project on graphene for a science show at RDS" - Student*

*"Great! Such a pity I didn't know before, would come and visit you at your stand!" - Anna, Engineer*

Many questions focussed on the use of electric cars and drones, and what the engineers were doing to help slow down climate change. There were other discussions about the engineers work and the real life applications, allowing them see science in everyday life:

*"Do ya know how long the cable across the atlantic is" - Student*

*"That's a good question, it took over a year to lay the first one. I just watched a documentary about that recently" - Anna, Engineer*

*"Had to double check, over 3500 km. Can you imagine how they put it on a ship? Took several turns" - Anna, Engineer*

*"How do you connect the networks in such long of a range such as between Ireland and Australia" - Student*

*"Remember the transatlantic cable? There are many submarine ones to connect the continents. We also have satellites for communication as well" - Anna, Engineer*

*"That sound cool" - Student*

*"Does anything you are doing in your job have an impact on global goals, is so what goal?" - Student*

*"As you know the generators converts the energy of diesel fuel to the electricity. So to reduce emission we are now using the renewable resource of fuel and also using additional equipment to reduce the Nox level in the exhaust system - Mahnaz, Engineer*

*"Yes, the work I'm doing is helping to develop renewable energy technology and there are clear goals set b the EU and UN for more renewable energy production - Ollie, Engineer*

*"Yes. Still today nearly half the world's population, mostly in developing countries do not have access to the internet. This limits their possibility of remote education or healthcare. We develop communication solutions that help connect more and more people, and close this so-called digital divide" - Anna, Engineer*



## Engineer winner: **Ollie Otter**

Ollie's plans for the prize money: *"I will use the money to build a small plexiglass demonstration wave pool that we can stick in the back of a car and bring around to schools or events like Seafest to show people what we do in our lab."*

Read Ollie's [thank you message](#)

## Student winner: **Tulips xx**

As the student winner, Tulips xx will receive a certificate and a gift voucher.

## Feedback

We're still collecting feedback from teachers, students and engineers but here are a few of the comments made about March's *I'm an Engineer*...

*This has been brilliant, so interesting. Thank you all for your wonderful input and your engagement with all the questions and for making it such fun.*

— Teacher

*thanks you we had a great time chatting with you, I have learnt alot, thanks!*

— Student

*The girls absolutely loved the live chat! They got such a buzz out of it, so much excitement in the room!*

— Teacher

*I'm very happy I could take part in "I'm an Engineer". It was quite intense but very fun 2 weeks! This is a great initiative, so thank you for putting so much time and heart into organising it. Hope that I could shed some light on the engineering, and maybe spark their interest in STEM.*

— Anna, Engineer

*This has been so much fun!!!!*

— Student