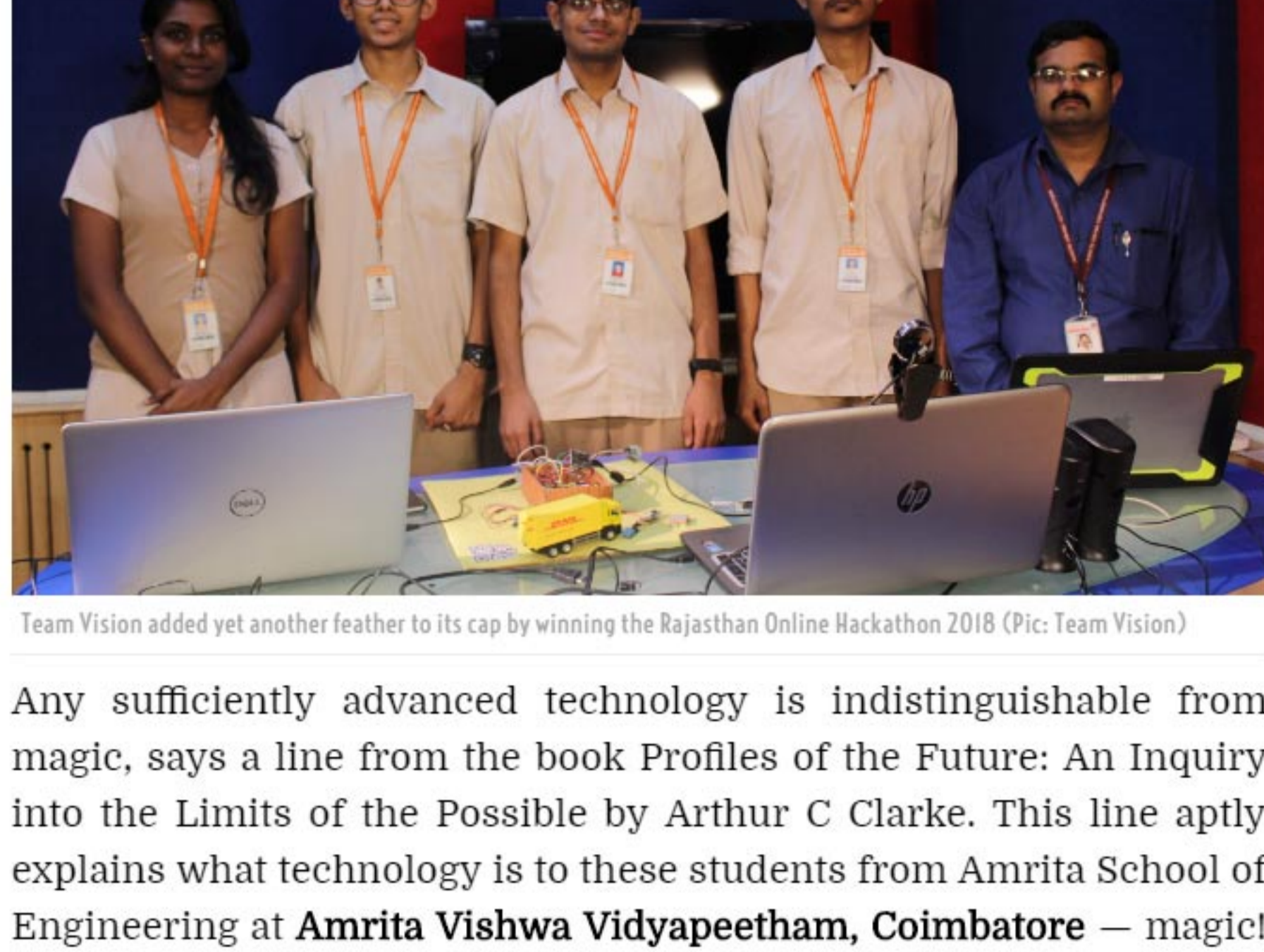


## Meet Amrita's Team Vision which has been storming hackathons all over the country

This bunch of engineering students from Amrita Vishwa Vidyapeetham have been storming hackathons all over the region with their tech-infused ideas and 'cool' coding



Shreesha Ghosh  
Edex Live



Team Vision added yet another feather to its cap by winning the Rajasthan Online Hackathon 2018 (Pic: Team Vision)

Any sufficiently advanced technology is indistinguishable from magic, says a line from the book Profiles of the Future: An Inquiry into the Limits of the Possible by Arthur C Clarke. This line aptly explains what technology is to these students from Amrita School of Engineering at **Amrita Vishwa Vidyapeetham, Coimbatore** — magic! And boy, they really have been busy creating some magic through their prototypes and apps that have earned them spectacular success in several hackathons around the world.

Sakthisree Venkatesan, Anupam Rajanish, Yeshwanth Sripathy, Vijey Shrivatsan — all below the age of 20 years and in the third year of BTech CSE — formed the group, **Team Vision**, to explore the endless possibilities technology has been creating for humankind and make efficient use of it. We spoke to the team members to find out what they are up to now.

Excerpts:

### How are hackathons helpful? Have you applied new ideas that you are exposed to at these events while creating your own apps?

We have learnt many valuable lessons that keep us going. Now, we have a sense of clarity and direction when it comes to creating and developing products that stakeholders would appreciate. We can understand the difference between what academia expects as opposed to what the industry expects and this enables us to appropriately decide our game plan. Both teamwork and leadership played a crucial role in delivering the best and it is with the right attitude and mindset that one wins any challenge that comes along the way.

### What inspired you to form a team and decide on participating in these competitions?

The imagination of the endless possibilities of marvellous time-travelling machines or flying cars created a spark within us to become the tech-evangelists that we are today. Our innate sense of curiosity and the mental model of a polymath has always propelled us forward to keep learning as much as we can and grab every opportunity to either apply it to create something useful or to develop our skills. We don't want to stop here but keep on participating in such events in the future.



*I am very proud of this Amrita student team for their outstanding successes at the international level. Inspired by our University Chancellor and renowned humanitarian leader, Sri Mata Amritanandamayi Devi, our thrust in preparing next generation graduates for challenges in science, engineering, technology and management is bearing fruit. The list of international competitions won by our AMRITA engineering students is no doubt one of the best in India - Mars Rover, Intel Python Hack Fury, Smart India Hackathon, Cisco Ideate and Google Summer of Code*

### Dr Sasangan Ramanathan, Dean, Faculty of Engineering of AMRITA Vishwa Vidyapeetham

### Some in the industry are now saying that it is better and more efficient to recruit candidates from these hackathons. Do you agree?

It definitely is a more efficient way to recruit students because hackathons simulate a more realistic environment of how the industry actually functions and the dynamic nature of business specifications. It gives a more appropriate insight into the skills of the student and how well the student adapts himself to fit into such an environment.

### How have the faculty and college authorities helped and guided you through these hackathons?

University administration has been very supportive. In particular, our Dean of Engineering, Dr Sasangan Ramanathan and Director-Corporate and Industry Relations, Dr C Parameswaran have spent their time also reviewing our work and presentations and giving suggestions.



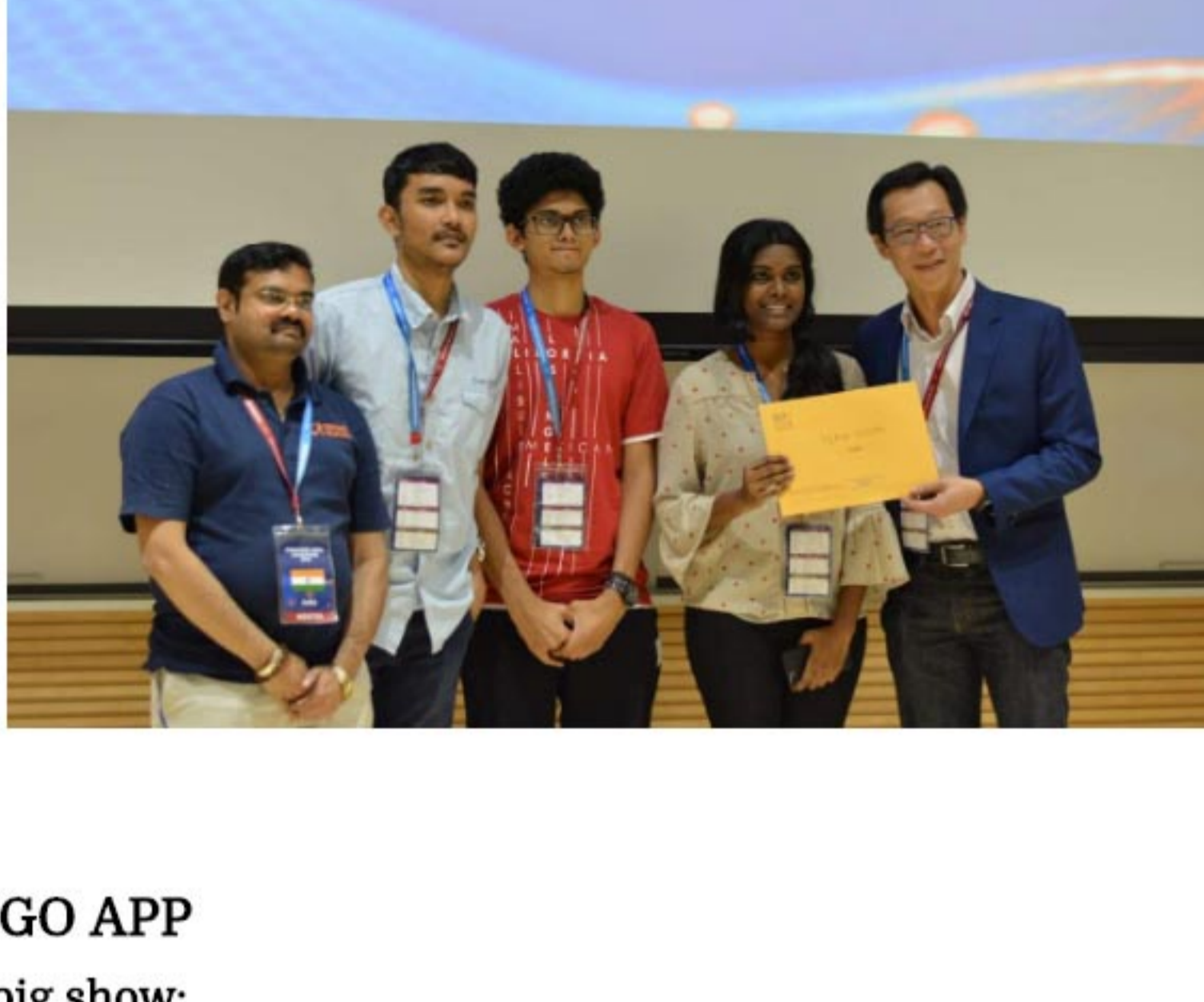
## LOGIX PROTOTYPE

### The big show:

Tata Consultancy Services (TCS) EngiNX Digital Twin Challenge 2018: This IoT-based design and innovation event is one of the most prestigious student contests in India with participation from over 75,000 teams from 1,600 institutions worldwide

### Prototype description:

LogiX is a smart manufacturing system for a Digital Twin of a logistics and transportation network. A Digital Twin is an exact copy or a replica of a physical asset or a system and behaves similarly to an IoT device, creating a digital footprint. Considering the fact that global supply chain losses due to accidents and damages run into billions of dollars, LogiX has the potential to be a game-changer for Industry 4.0. Today, it's not companies that are competing, but their supply chains. Most of the supply chain losses happen due to accidents and damage to goods in transit. LogiX will ensure twinning of a commodity from the warehouse, where the goods are transported with trackers, and their array of IoT-enabled sensors, transportation over road/air at the ports where the communication between Control Operation and Shipping Port and that of truck drivers — for fatigue/ distraction/accident avoidance. Indirect logistics costs can be significantly reduced using the system. LogiX provides businesses with a platform to view critical information and the digital twin through Android applications and AR/VR headset. It boxes- namely the AccBox for accident monitoring and ComBox for commodity monitoring. Both the boxes consist of IoT sensors which relay in sensory data in real-time to the analytics cloud- Thingspeak and then to Firebase from where the necessary output/digital twin model is shown in the Android App.



## UNIGO APP

### The big show:

Singapore-India Hackathon 2018 at Nanyang Technological University, Singapore

### The team:

Anupam Rajanish, Sakthisree Venkatesan and Yeshwanth Sripathy batch of BTech (2016-2020) in Computer Science Engineering (CSE)



**Registration made easy:** The team's UniGo App assigns every person registering with a unique ID so that there's no confusion when students register or enrol for an event

### App description:

The theme of the hackathon was 'Smart Campus'. The problem statement was 'Integration of Digital Identity for Effective Event Registration'. Often, students register with multiple email addresses for the same event causing redundancy in data and improper planning and resources.

To avoid these issues, they came up with an Android App named UniGo that assigned every person registering a unique ID. For students, the unique ID accepted to log in to the app was their roll number. For outside guests who wished to register for an event happening inside the campus, their fingerprint and Aadhaar card/National ID card was taken as an input for verification, following which, the app assigned them a unique ID that expires as soon as the event is over. Effective attendance-tracking was also taken care of by creating a virtual geofence around the event and tracking all the registered participants inside the geofence of the location of the event. The time spent by each participant was also recorded and further details received from the app such as event feedback, interests and number of participants was used for data analytics.