



# TINKER TIMES™



**JULY'21 EDITION**

# EXPERT TALK

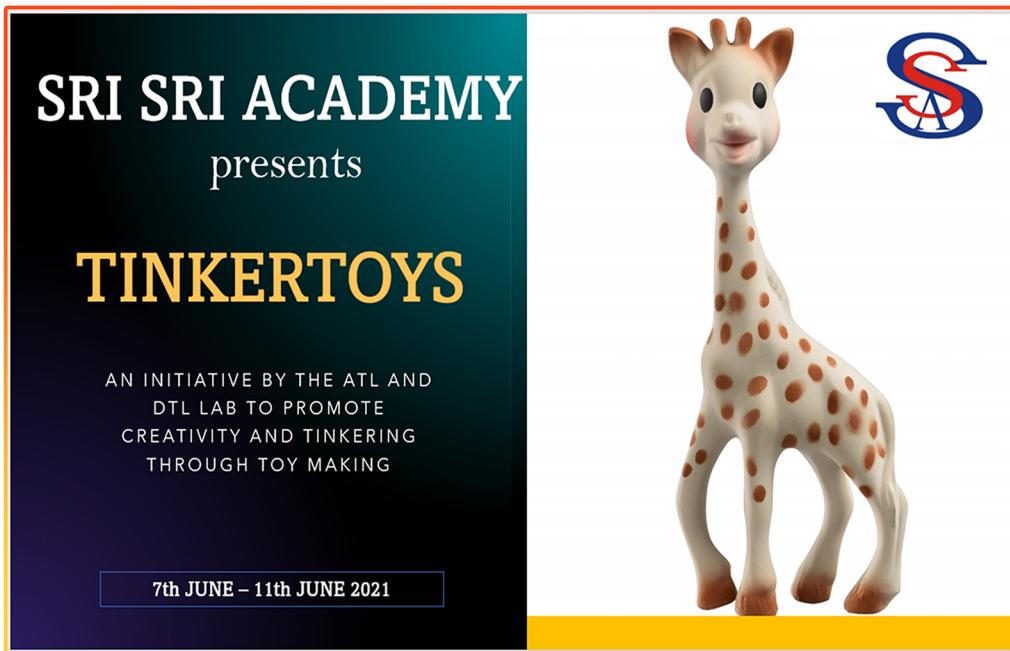
Prof. Dr. Jyoti Sekhar Banerjee  
(Bengal Institute of Technology, Kolkata)  
Tech advisor, Rabvik Innovations



First of all, I would like to congratulate all the students of Sri Sri Academy, Kolkata, for continuing and taking part in Atal Tinkering Lab in association with Rabvik Innovations, powered by NITI Aayog, Govt. of India. Also, I would like to congratulate the school management for organizing Hackathon, Toycathon, technical quiz, technical debate, etc., frequently. It is also a piece of great news that Rishav Majumder, a student of Class 9, presently received very prestigious the INSPIRE Awards - MANAK Award by the Department of Science & Technology (DST), Government of India for his innovative project proposal. Extention of their project work, students can also publish their innovative work in reputed Journals and Conferences and file their own patents. In this way, we may have next-generation entrepreneurs who can also fulfil the purpose of the new education policy of our country in terms of generating employment through their own initiatives.

# HAPPENINGS@SSA

Sri Sri Academy organized a week-long during (7-11 June) toy-making workshop- TinkerToys 2021. Students of grades 6, 7, and 8 participated in the same with an overwhelming response.



## A GLIMPSE INTO THE SESSIONS





## THE SESSIONS



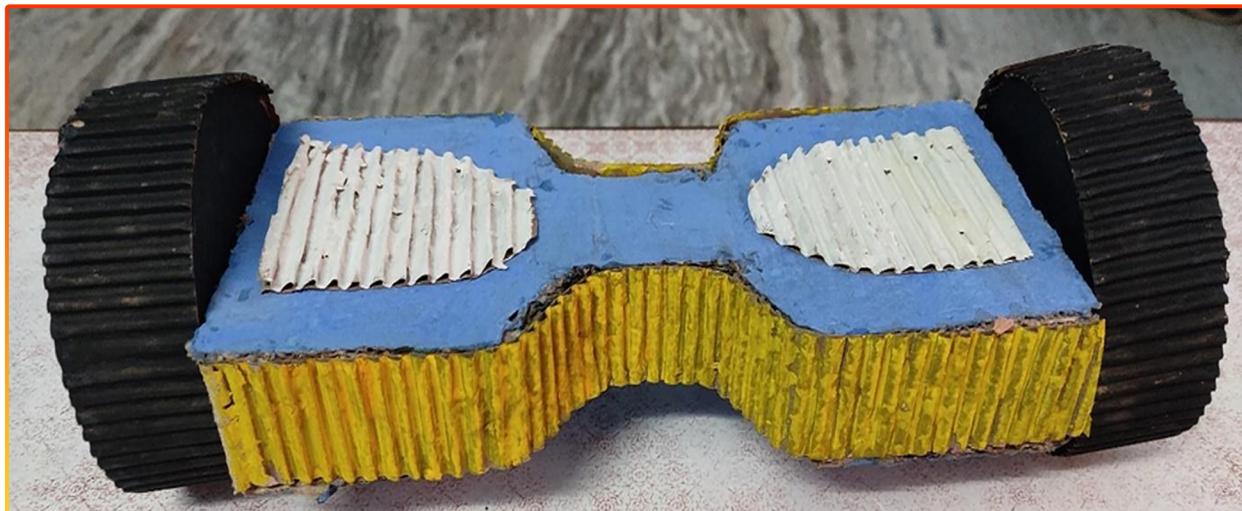
**ANUSHKA AGARWAL, VII**



**HIMANSHI KHAITAN, VI**



**DEVANSHI AGARWAL, VIII**



**VISHESH SETHIA, VII**



**HARSHIT SEKHSARIA, VIII**



**SHAURYA AGARWALA, VII**

# AUGMENTED REALITY

(Korock Hazra, Class VIII)

First let us understand in simple words what is AR (Augmented Reality). “Augmented reality (AR) is the real-time use of information in the form of text, graphics, audio, and other virtual enhancements integrated with real-world objects.” As defined by Gartner’s IT Glossary.

It is basically a kind of technology that augments user's real time experience or visual perception of their surroundings. It is a technology with interactive digital components (for example – images, sound, text) that gets superimposed over a real world environment. Unlike virtual Reality (VR) it does not use special headsets to pull the users into a completely digital world. It is not a fully immersive experience like VR. AR is made possible by the use of smartphones. It is one of the biggest technology trends right now.

AR application enhances our experience using several digital overlays. For example, real time directions, superimposing images, digital information and/or 3D models, inserting labels, changing colors, altering the user or their environment's appearance via "filters" on Instagram, Snapchat, and other apps.

# AR IN OUR EVERYDAY LIFE

Let us see how we use AR or how AR helps us in our everyday life.

**Sports:** While watching a cricket match we often see, analysts using AR to draw lines on the field to show how a ball that has been thrown by the bowler has reached the batsman travelling a path.

**Selling Retail:** IKEA, which is a renowned furniture seller, uses an AR app called IKEA Place to show how a piece of furniture will look and fit in your space.

**Healthcare:** Neurosurgeons sometimes use an AR projection of a 3-D brain to aid them in surgeries.

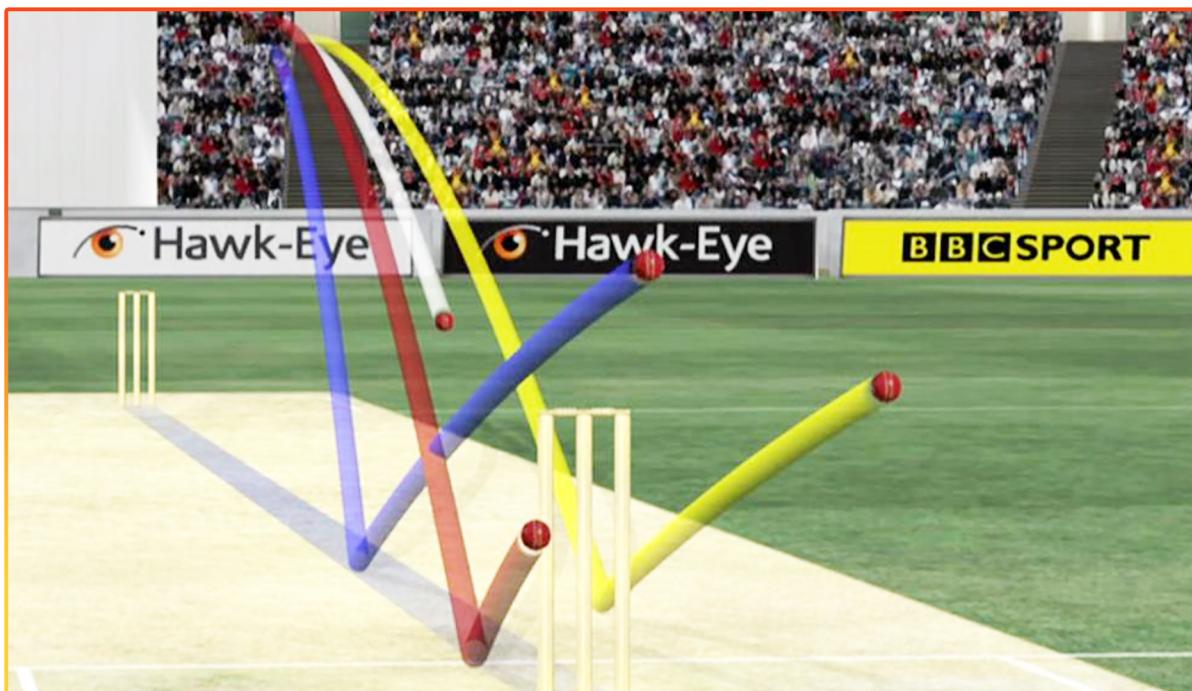
**Navigation:** Adding real time directions (over roads while driving or cycling helps the traveler or navigator to understand which route to take or what are the facilities in taking a particular route.

**Game Development:** The most famous example of AR technology is the mobile app Pokémon Go, which was released in 2016. In the game, players locate and capture Pokémon characters that pop up in the real world—on your sidewalk, in a fountain, even in your own bathroom.

Below are some of the images which will help us to understand how AR works in our everyday life visually.



**USING AR IN RETAIL SHOPS TO LOCATE**



**USING AR TO ANALYZE SPORTS (CRICKET HERE)**



## AR FOR GAME DEVELOPMENT



## AR ENHANCING OUR STUDY EXPERIENCES

## AR: COMMERCIAL OPPORTUNITIES

The commercial opportunities of AR are growing. Below are just a few statistics that indicate that the impact of AR in business is only growing:

- 61% of consumers say that they prefer retailers that provide AR experiences.
- 71% of shoppers say that they would shop more often if they could use AR.
- Using AR technology in eCommerce can increase conversion rates by 40%.

## FUTURE OF AR

Augmented Reality will change our life in more ways than we can think of.

AR is already being utilized in industries including manufacturing, healthcare and logistics. Augmented reality experiences are typically delivered through headsets, such as Meta, ODG, Vuzix and HoloLens, and are showing early signs that the technology is set to transform commercial and industrial markets.

The AR/VR devices of the future will provide personalized, accessible and well-designed experiences. As these elements take hold, a platform shift is imminent. Hopefully, within three years we are going to see new AR glasses with LTE capabilities that will become an alternative to the smartphone.

LET'S SEE WHO GOT THIS!!

# QUIZ TIME!

