



## DigiEduHack Solution

Emerging technologies for holistic learning (Berlin)

Challenge: Emerging technologies for holistic learning (Berlin)

**A highly scalable and engaging medium of learning: Smart Toys, targeted towards student groups to promote a sustained and structured value based holistic education to uplift and empower the creative minds of tomorrow**

### Humanizing Technology for education



Coping with death of loved ones during this pandemic ? this pandemic not letting follow your passion in art? we are here to spread joy through toy based phygital interactive experience. Introducing SOBA, Bringing AR-VR experience right at your door.

### Team: SOBA

#### Team members

Aditya Yelgawakar

#### Members roles and background

AR VR developer currently working with infosys research lab. good hands on experience with combination of different technology needed to develop solution. We used AR VR+ COMPUTER VISION+ AI/ML + 3d Printing to develop this solution

## Contact details

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## Solution Details

### Solution description

Our Toy is combination of physical and digital product. single physical toy can be used to experience 3 use cases. Our Toy is combination of physical and digital product. single physical toy can be used to experience 3 use cases. 1) Use case 1: Holographic display to interact with virtual avatar of any person: App takes single picture and audio file as input & forms holographic image on mobile screen which is when seen on hologram create 3d illusion. Preserve your own Avatar and share stories with kids. 2) Use case 2: Augmented reality based art multiplayer game/app to let user draw sketch using AR reference image with free hand setup. This will be helpful for everyone starting from school going kid to product designers. 3) use case 3: of symbolic language promote use of disappearing languages of india. User with the help of AR based app perform some hand gestures in front of camera to let the AI guess letter corresponding to gesture. Karpawali language demo : <https://www.youtube.com/watch?v=bi0taPU-Sic&t=59s>

### Solution context

The COVID-19 pandemic stressful for both adults and childrens And many people lost their close ones, we wanted to connect people with their dear one who lost their life during pandemic. As a trained cadet at army institute we ourself understood value of this precious life. and this was biggest motivation behind creating this experience. we also firmly believe that art teach us alot about life. and though students are getting most of the theoretical knowledge from online education but there is no solution that will help teachers teach practical subjects like art to students

### Solution target group

Children between age group 5-16

### Solution impact

Use case 1 of holographic display with virtual being is itself based on human quest for immortality concept. Use case 1 of holographic display with virtual being is itself based on human quest for immortality concept. Use case 2 of AR based ART education game promote social and emotional intelligence in user . It will also introduce them to different Art form like warali painting through art by simply providing textual info. for each corresponding AR image. use case 3: of symbolic language promote use of disappearing languages of india. User with the help of AR based app perform some hand gestures in front of camera to let the AI guess letter corresponding to gesture. Not just that , our toys are thoughtfully designed and it is completely made of eco friendly material and thus safe for users of any age group.

## **Solution tweet text**

Coping with death of loved ones during this pandemic ? this pandemic not letting follow your passion in art? Introducing SOBA, Bringing AR-VR experience right at your door. Let child interact with their favourite person virtually to grow kid's emotional and social intelligence

## **Solution innovativeness**

This one phygital toy is combination of AR,VR, AI, 3D printing and provides runtime results based on your behaviour. This itself open lot of possibility to experiment and create services as per user need in future.

## **Solution transferability**

This Toy idea is product of different life experiences we had like army life experience ,Cancer patients experience and Values taught by parents, inspiration from Indian scriptures.This toy will be helpful for children to learn about those experiences.This Toy idea is product of different life experiences we had like army life experience ,Cancer patients experience and Values taught by parents, inspiration from Indian scriptures.This toy will be helpful for children to learn about those experiences.it can be also use as news bot , stress relief at trauma centers and for learning some serious skills like product design (advance use of use case 2)

## **Solution sustainability**

A highly scalable and engaging medium of learning: Smart Toys, promote a sustained and structured value based education to uplift and empower the A highly scalable and engaging medium of learning: Smart Toys, promote a sustained and structured value based education to uplift and empower the creative minds of tomorrow and all at minimal cost , through gamification. also Use case 2 specifically designed to let the user learn subjects like drawing , fine art and product design. Now, in advance level, user created drawings can be taken further to create actual physical prototype/ toy using 3d printing technology. This will create a great value to users of app as they will be able to quickly put order and get the customise drawing printed in short time and make their own products. value proposition for future : develop Web based platform to evaluate performance of individual user and let the teachers/ educators create customise assignment for each student as per their performance which can be accessed through mobile app.

## **Solution team work**

i work with team of AI experts , game developer and full stack web developer and also local manufacturers to learn and develop my own solution. we also have strong technical background in AR VR so we are looking forward to develop 2 more variation of this product