

# RuralEdge

Digital Health, Education at the Rural Edge

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 THE **LINUX** FOUNDATION

 **LF** EDGE

## Treating the last “**patient**” on the digital lane

- › 850 Million in Rural India
- › 1 Doctor per 1497 person



- › 600K HealthCare workers
- › No Digital Aid
  - › Low Internet Bandwidth
  - › No Internet No Apps
- › Basic resources are not available



# Educating the last “**student**” on the last mile: For all age and stage



## Giving Edge to the last mile: Lean-Green-Smart Network



Proof of Concept  
10 Tribal Villages  
45 Km from nearest City  
Partner : BSNL in remote zones





# Video to Edge to (Different) Video



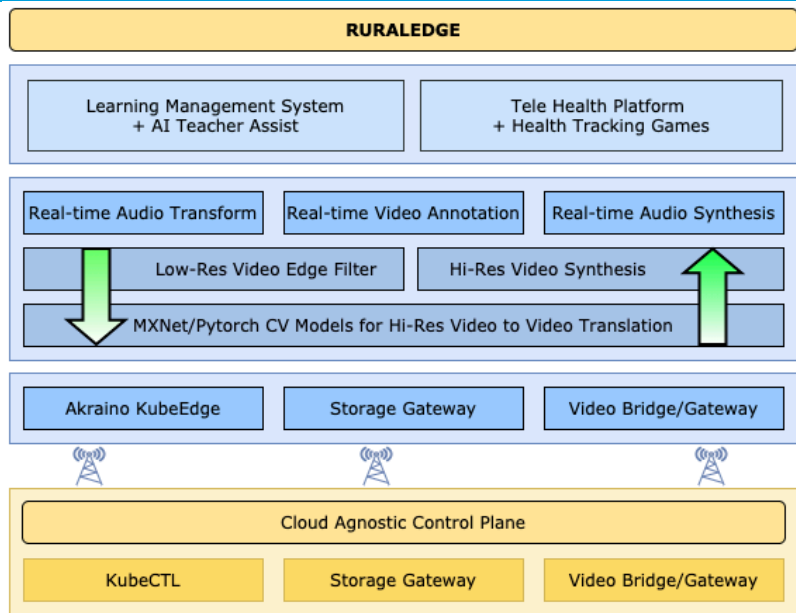
1. Convert Input Video to “edges”
2. Use “edges” Video in Video Conference used in LMS & Tele-Health platform
3. Convert “edges” Video to output Video

1. Work in extreme low bandwidth
2. Allows removal of environmental distractions
3. Privacy Blocks
4. Levels the playing field
5. Mental health Counselling

## Multiple Outputs for Edge-to-Face



## BP Family: Tami COVID-19



Target Industry: HealthCare, Education in Rural/Remote areas

### Purpose/Features:

- ML Audio/Video Enhancements using GAN
- Tele-Health, and LMS on the edge.
- Control plane on the cloud
- Media plane close to customer site such as MEC servers in telco central offices.

### Use cases & Applications

- Video Processing : Enhance Engagement Quality, Augment Video with information, Create Virtual environment, Transcribe engagements
- Telehealth : Appointment Scheduling, Payment Processing, Electronic Health Records
- Gamification : Reinforce Corrective Behavior, Track Progress, Generate Trends
- Learning Management System : AI Teacher Assist, Early Progress Prediction



# Validation and Engagement

**MIT COVID-19 CHALLENGE**  
Presents **INDIA TURNING THE TIDE COVID-19**  
August 28 - 30 | Virtual Event  
Application deadline: August 26

**Track E. Developing new ways to deliver care in a COVID-19 and post COVID-19 world**

**VaccinateIndia**

- Problem:** How to facilitate safe delivery of vaccines to large populations of India during and post pandemic?
- Solution:** A digital platform for vaccine record-keeping, reminder, scheduling and inventory management

**SIPPE**

- Problem:** Frontline healthcare workers face a daily challenge to stay in the personal protective equipment (PPE) for a longer duration due to exhaustion caused by profuse sweating and discomfort.
- Solution:** An alteration/addition to the current personal protection equipment (PPE) used in the current pandemic of COVID-19 giving a physiological/physical push to the front line workers.

**ASHA ki Kiran**

- Problem:** Overworked community workers cannot deliver optimal healthcare in rural India.
- Solution:** Leveraging on-ground communication tech to optimize and enable community workers to deliver effective care through real-time patient monitoring and triage of health problems in rural India to reduce on-field burden.

**Docs@Home**

- Problem:** Patients without COVID-19 awareness is a big challenge for Pandemic management.
- Solution:** Connecting the evading rural COVID Patients to Healthcare Workers through education.

**Our Team**



**solution components**

MIT COVID-19 Challenge : India Turning the Tide

**our unique team & our mentors**

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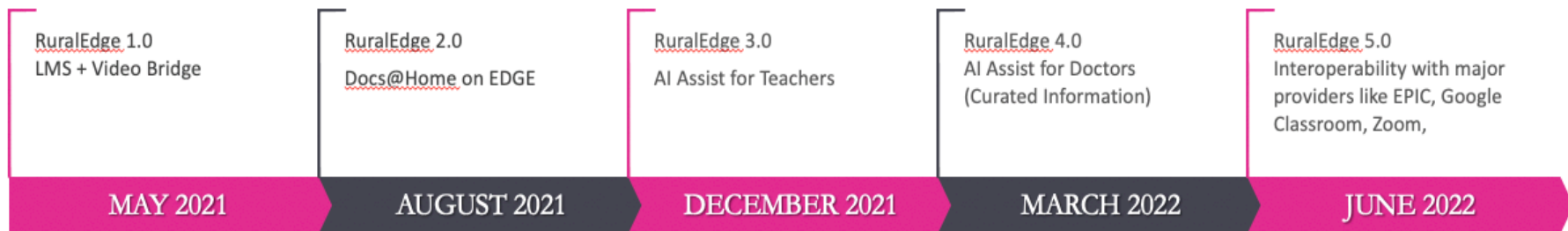
Dayalbagh Educational Institute

Smart Gaon Foundation

## Journey so far



## And Road ahead





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Wiki :

<https://wiki.akraino.org/display/AK/Rural+Edge+blueprint+for+Tami+COVID-19+Blueprint+Family>

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