

IEST Institutional Startup Competition

By IIC 6.0

**The results of the final round of IEST Institutional Startup Competition held on
16th July 2024**

As evaluated by panel of experts

- i) Mr. Sanjoy Chatterjee, Cofounder & Director, Entiovi Technologies and
Chairman NASSCOM Eastern Zone
- ii) Dr. Pratik Dutta, Professor, Mining Engineering, IESTS
- ii) Dr. Surajit Roy, Associate Professor, Information Technology, IESTS

the following startup proposals have secured the 1st, 2nd and 3rd ranks.

Rank	Startup Proposal	Group member/s
First	मनSEEK	1. Sudipta Dhar, Electrical Engineering 2. Sudev Sircar, Electrical Engineering
Second	Recordex	1. Rohan Das, Aerospace Engineering 2. Pritam Bag, Computer Science and Technology
	Auto@Kol	1. Deepon Halder, Information Technology 2. Angira Mukherjee, Electronics and Telecommunication Engineering
Third	ThermalGuard - Real-Time Structural Health Monitoring	1. Ayush Chandram, Civil Engineering

Congratulations to the winners.

A brief description of the winning proposals is presented herewith.

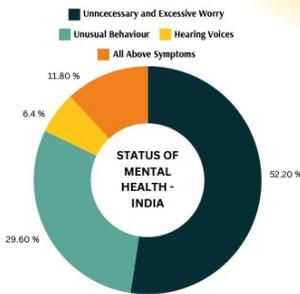
Dr. Joydeep Bhowmik
Dr. Shyamalendu Kandar
(Event Co-Ordinators)

1. मानSEEK

Objective : मानSEEK is a B2C platform that aims to transform India's mental health landscape by connecting individuals with certified mental health professionals and career advisors. The platform addresses the shortage of mental health resources in India, offering therapy sessions, relationship counseling, and career guidance in multiple languages. Using AI-powered matching, flexible options for sessions, and features tailored to the Indian context, मानSEEK strives to make mental health support accessible, affordable, and culturally sensitive.

PROBLEMS

1. India has less than 1 Mental Guide accessible per lakh population.
2. 14% of India's population suffers from mental health disorders
3. Out of every 100 Indian adults, 99 feel that they have chosen the wrong career path and 86 feel they are "suffering" or "struggling" at their workplace.
4. There is still a huge societal stigma surrounding mental health that prevents many from seeking help.
5. Traditional treatment methods lack cultural sensitivity and caters to limited languages



Solution

मानSEEK is a B2C platform connecting individuals with certified mental health professionals and career advisors.

THERAPY SESSIONS, RELATIONSHIP COUNSELING, AND CAREER GUIDANCE

To address issues in Career/Finance, Behaviour Management, Loss/Grief, Mental Health, Kids/Parenting, Family/Friends and many more!

FLEXIBLE OPTIONS

Online, In Home, or at Therapist's Location.
Talk to Our AI-Assistant / Give a call on our 24 X 7 available number for instant help.

FEATURES

SMART MATCHING

AI Powered Matching to connect with the Therapists which are best suited for your problems.
Intermediate helpers to understand your feelings better!

ADVANCED SUPPORT

Multi Lingual Platform to address India's diverse linguistic and cultural landscape
Blockchain to store anonymous data and train our Machine Learning Models

UNIQUE FEATURES

Customisable Pricing

Integration with wearable devices

Gamified Online/Offline exercises

Personalised Resources and Guides

Anonymous Community forums & Peer Support



2(i) Recordex

Objective: Revolutionize offline in-person meeting recording, transcription, and summarization with a mobile application.

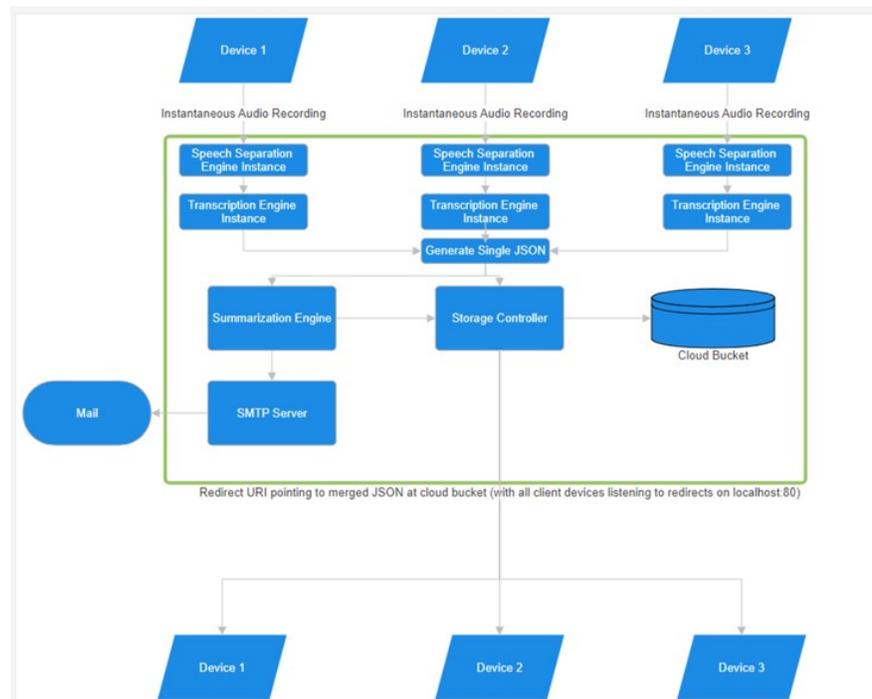
PROBLEM STATEMENT:

- **Information Loss:** Critical meeting points are often forgotten or miscommunicated.
- **Inefficiency:** Manual note-taking is time-consuming and error-prone.
- **Difficulty in Review:** Searching through lengthy recordings is cumbersome.

SOLUTION

RECORDEX offers a seamless solution by:

- **Mobile Application:** Capturing high-quality audio directly from users' devices.
- **Server-End Processing:**
 - **Speech Separation Engine:** Utilizes an open-source speech separation algorithm.
 - **Transcription Engine:** Converts speech to text with high accuracy.
- **Unified Data Management:** Combines data from all devices in the same meeting into a single JSON file.
- **Summarization Engine:** Processes the JSON file using an advanced LLM to generate a concise summary.
- **Chat Interface:** Displays the transcribed conversation in a WhatsApp group chat-like format for easy future reference.



2(ii) Auto@Kol

Objectives: The Auto@Kol project aims to develop a mobile app that optimizes auto-rickshaw routes in Kolkata, India. Its main objective is to reduce travel time for commuters by suggesting efficient auto-rickshaw routes between destinations. The app will integrate official auto-rickshaw route data from the West Bengal government with mapping technology to provide users with the fastest and most convenient travel options.

GOALS

We intend to create an App, Auto@Kol, which will solve all the issues mentioned in the first part of the presentation.

This app will seamlessly let it's user know how to travel from one place to another in the shortest time, using autos.

This app aims to make the journey of the daily commuter, not only easier but way faster.



HOW TO IMPLEMENT IT?

We will be using a map with its navigation and direction APIs to figure out the optimum and shortest route between two places.

Then the data received from the Govt will be used to figure out the optimum auto routes.

Finally our app will suggest the best route to cover from A to B using autos in the shortest amount of time.

Some parts will not having autos, for those routes, separate public transport means will be used.



FEASIBILITY OF USAGE

High frequency, affordability, and doorstep convenience make autos popular. Nearly **70%** of survey respondents use auto-rickshaws frequently, while **30%** use them occasionally. Most prefer autos for multiple commute legs. Even with low private vehicle ownership (**12%** two-wheelers, **8%** four-wheelers), **58%** of daily auto users own four-wheelers and **48%** two-wheelers.



Source - Study by Centre for Policy Research (2017)

3. ThermalGuard - Real-Time Structural Health Monitoring

Objectives: The objective of ThermalGuard is to revolutionize the construction and maintenance industries by providing an advanced, real-time structural health monitoring solution. By utilizing thermal imaging and deep learning, we aim to enhance the early detection and monitoring of structural issues, ensuring the safety and longevity of buildings. ThermalGuard employs thermal cameras to capture video footage of structures continuously. These thermal images are then analysed using deep learning techniques to detect damaged regions, such as cracks and other structural issues. The system generates detailed visual reports and offers recommendations for necessary repairs and maintenance.

Problem?

In the construction and maintenance industries, early detection and monitoring of structural health issues such as cracks, weathering, and other damages are critical to ensuring safety and prolonging the lifespan of buildings.

Traditional methods of structural health monitoring are:-

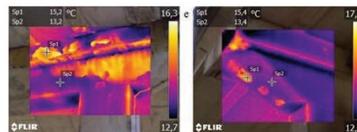
1. Often time-consuming
2. Labor-intensive
3. Sometimes fail to detect subtle issues.



2

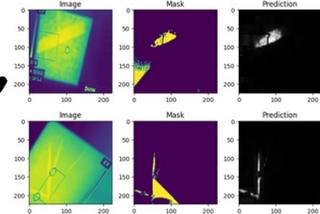
OUR SOLUTION

ThermalGuard



Using Thermal Images to capture damaged region of structures.

Detection of the damaged region based on Our Model.



4

Working Architecture

