

PANIMALAR ENGINEERING COLLEGE

(A Christian Minority Institution)

JAISAKTHI EDUCATIONAL TRUST

Approved by All India Council for Technical Education, New Delhi

An Autonomous Institution, Affiliated to Anna University, Chennai

All Eligible UG Programmes are Permanently Affiliated to Anna University

All UG Eligible Programmes are Accredited by National Board of Accreditation (NBA)

Approved by UGC for 2(F) & 12(B) Status

BANGALORE TRUNK ROAD, VARADHARAJAPURAM,

POONAMALLEE, CHENNAI – 600 123.

Phone : 91 - 44 - 26490404, 26490505, 26490717 Fax : 91 - 44 - 26490101,

E-mail: info@panimalar.ac.in

Website: www.panimalar.ac.in



Dr. P. CHINNADURAI, M.A., Ph.D.,

Secretary & Correspondent

C. VIJAYARAJESWARI,

Director

Dr. C. SAKTHIKUMAR, M.E., Ph.D.

Director

Dr. K. MANI, M.E., Ph.D.,

Principal

Date: 05/01/2022

Sub:- Appointment of nodal officer for Smart India Hackathon 2022- reg.

His/her contact details are as under:

Name : Dr.V.D.Ambeth Kumar
Designation : Professor
Bureau/Dept./Organization : Computer Science and Engineering
Complete Address : Panimalar Engineering College,
Bangalore Trunk Road,
Varadharajapuram, Poonamallee,
Chennai,
Tamil Nadu - 600123
Phone no. : 044-26490404
Email : vdambethkumar@panimalar.ac.in

Problem Statement: MICROLEVEL PROJECTION OF MEDICAL NEEDS AND AUTOMATIC SUPPLY LOGISTICS THROUGH AI/ML

SIH 2022 Scheme: Smart Automation

TEAM MEMBERS:

1. HARINI R A (211420143019 - AI &DS Dept.)
2. SUPRIYA K V (211420243058- AI &DS Dept.)
3. SUBA SREE SUDHAKAR (211420243057 - AI &DS Dept.)
4. BHARATHI A (211420243009- AI &DS Dept.)
5. ROSHINI V R (211420243046- AI &DS Dept.)
6. BHAVITHRA S K (211420243010- AI &DS Dept.)

Further, the Problem Statements for the SIH 2022 is also enclosed herewith for further necessary action.



[Signature]
Dr K. MANI, M.E., Ph.D.
(Head of the Institution)

PANIMALAR ENGINEERING COLLEGE

Bangalore Trunk Road, Varadharajapuram,
Nasarathpettai Poonamallee,
CHENNAI - 600 123

Smart India Hackathon(SIH) 2022- Problem Statements

Problem Statement-1

MICROLEVEL PROJECTION OF MEDICAL NEEDS AND AUTOMATIC SUPPLY LOGISTICS THROUGH AI/ML

Covid-19 has put us in both dis-advantageous and advantageous positions. We have some lessons to be learnt from this and extrapolate it for a larger issue in our Indian Society. India does not have an integrated patient record system. The many to many relationships is the main cause for disconnect of one-patient-one-record system. Corona, due to pandemic necessity, the government (both center and states) has started collecting patient information with a goal to tracking the spread and vaccinating the people against it. A ray of hope with respect to integrated management starts here. Now that we can map a patient with one disease (Corona) and track him chronologically and demographically. We need to expand this for selected non-communicable diseases (cancer for example) and build a record. This record, as with current Corona scenario, could be maintained at national level and be accessed by the entire medical fraternity- starting from pharmacies. Since it is non-communicable and chronic, patient might require regular attention, which can be projected through AI, for example, number of cancer patients in one zone and their phase and amount of chemo's for each and their successive check-ups. Using this data logistics like doctors, equipments, medicines, etc. can be predicted well ahead of time and a medical supply chain can be built bottom up using AI and ML.