

Developing Online Repository of Business Plan/ Prototype Developed and way forward plan

INSTITUTIONS INNOVATION COUNCIL

IIC ID: IC201810376

P.S.N.A. College of Engineering and Technology (C-26783)

Star Ratings: IIC 3.0

Guidelines : [Application Submission - FAQ](#) | [YUKTI National Innovation Repository - FAQ](#) | [YUKTI-NIR Orientation Session](#)

Idea / PoC Repository Innovation / Prototype Repository Business Model / Startup Add / Manage Verifier

Total Individuals Registered: 59

Total Ideas Submitted: 25

Total Ideas Assigned: 10

Total Ideas Verified: 9

Total Ideas Recommended: 9

Application Submission Link of YUKTI National Innovation Repository (NIR): <https://yukti.mic.gov.in/login/SUMyMDE4MTAzNzY=>

(Please share this link with your Students/Alumni/Recent Graduates/ Faculty/Staff /Entrepreneur/Startup Founders incubated at the Incubation Unit of the institute for registration and submission of their Ideas/Innovations/Startups developed/supported at your institute)

Sr. No.	Innovation ID	Date of Submission	Innovation Title	FY of Development	Developed as part of	Team Lead Details	View Idea Details	Verification	Avg. Score	Status
1	IR2022-785019	08-09-2022	smart system for detecting the food is edible	2021-22	Academic Requirement/Study Project	PREMKUMAR P Premkumarp21ec@psnacet.edu.in 7904570480 Student	View Details	Assign - 2		Pending

Idea / PoC Repository

1. Total Individuals Registered: 59
2. Total Ideas Submitted: 25
3. Total Ideas Assigned: 12
4. Total Ideas Verified: 9
5. Total Ideas recommended: 92

Innovation / Prototype Repository

1. Total Individuals Registered: 59
2. Total Innovations Submitted: 3
3. Total Innovations Assigned: 3
4. Total Innovations verified: 2
5. Total Innovations recommended: 2



INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

smart system for detecting the food is edible

Team Lead Name:

PREMKUMAR. P

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Team Lead Phone:

7904570480

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Process

TRL LEVEL:

1

Theme:

Consumer Goods and Retail,

Define the problem and its relevance to today's market / society / industry need:

At present, almost everyone is affected by the foods they consume daily. Almost all humans pay attention to the information provided in the packets to detect the expiry date of the food. However, the major issue arises from blindly believing in the provided data. To provide safe food, this paper has developed an app involving detection unit. This app provides protection to the user's health that is necessary for maintaining the quality of food.

Describe the Solution / Proposed / Developed:

Most of the food in malls and hotels is found to be expired or rotten. We don't have time in this fast-paced world to check or verify whether the food is healthy or not. To overcome this problem, we designed this app to check the quality of food at any time, at any place. This app has been created to lay down science-based standards to ensure the availability of safe and healthy food for humans. Having this app also gives a competitive advantage as the users trust the hygiene and quality of food

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Presently, the application of IoT technology in food detection applications is still in the embryonic stage and an extendable distance for enhancements. Food spoilage, hygiene, and safety are critical components in preventing food waste and disease transmission. In the android application, the user can get the quality of food data and information in real-time. The app keeps individuals and groups from becoming infected by unhealthy food.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

Presently, YUKA is one of the leading competitors in the food industry. This app is only for packaged foods, and we developed this app for both packaged and unpackaged foods. While the YUKA app mainly focuses on diet control, our app mainly focuses on whether the food is edible or not.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

https://youtu.be/_r_JZ7Xx0Vs

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

BLOOD DONATION APP BY BLOCKCHAIN TECHNOLOGY

Team Lead Name:

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9087949231

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Service

TRL LEVEL:

1

Theme:

Software - Mobile App Development,

Define the problem and its relevance to today's market / society / industry need:

In today's environment, though there are more apps for blood donation, the apps are not secure enough to store the information. Government hospitals have low access. Blood donation has become a huge business in today's market. Hence, there is a high death rate due to heavy bleeding and the unavailability of rare blood groups. The arising problems are that the age limitation is not verified, blood checkups are not taken, and there is no gap between the blood transaction period.

Describe the Solution / Proposed / Developed:

"Blood donation", a major business in today's world, can be used by wealthy people with the help of private organizations. Hence, there is low access to government hospitals and there is no awareness of blood donation. The active participation of the donor in blood donation is our motive. We solved the problem by developing an app that has access to government hospitals and no private sector can interfere. It allows users to login with their phone number and AADHAR verification.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Nowadays, the apps used are not managed properly, and the information given is almost always fake. Hence, we are providing an app that can be accessed by government hospitals only. Here we use Aadhar verification for age identification. The app contains information about the blood test results, the date of blood donation, and the gap between the period for blood donation and the next donation. Here we use blockchain technology to secure the aadhar and donar's contact information.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

The website named "Save Life" has the features to locate the donars for all communities and provides information about the donars during emergencies. This application can't locate the exact location of the donor in a specific area during emergency times. Here we provide the exact location of the donor in a specific area. Here, block chain technology is used to ensure the safety of the donor's information. It also connects with blood banks. We can only login through a one-time password(OTP).

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

THERMOELECTRIC CONVERTING DEVICE

Team Lead Name:

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6369662159

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study Project

Innovation Type:

Product

TRL LEVEL:

1

Theme:

Renewable and affordable Energy.,

Define the problem and its relevance to today's market / society / industry need:

70% of energy produced in power plants is lost in the form of heat. Copper which is used in thermoelectric generator is less effective.

Describe the Solution / Proposed / Developed:

To overcome this we proposed an idea which converts the wasted heat energy into electrical energy by using seebeck effect.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

We use pyrolytic graphite which has a specialized five-nine purity. The graphite provides a long term usage and has low maintenance cost. Graphite can withstand higher temperatures increasing the efficiency of the generator Can be fixed directly to the heat source. Designed to work in complete silence. No moving parts to damage or wear out.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

Amount of energy produced is relatively high. Long Term usage. Cost efficient. No moving parts.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

null

Innovation Photograph:

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

EN(EMERGENCY NURSING)-BOT

Team Lead Name:

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6383214526

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product,Service,Business/Management Innovation

TRL LEVEL:

1

Theme:

Healthcare & Biomedical devices.,Robotics and Drones.,Software - Mobile App Development,Smart Cities,

Define the problem and its relevance to today's market / society / industry need:

LACK OF ELECTRONIC HEALTH RECORDS (EHRs) INTEROPERABILITY A recent KLAS research report shows that more than 85 % of hospitals and clinics indicates they don't have the patients entire history in one place And in an emergency situation, there may not be time to go after all the pieces.
ABSENTIA/LACK OF DOCTORS AT EMERGENCY CASES Unavailability of doctors at emergency cases make the patients lives at risk. Improper maintenance of old aged patients in orphanages.

Describe the Solution / Proposed / Developed:

Our ED Bot will automatically stores the EHRs of the patients even by the voice recognition method (Example :Alexa) which is one of the most important parameter to go through their health progress. It will pave way for the interaction of doctor with patients during emergency times and also this can do the basic check up like pulse rate, heart beat, pressure and so on and send those reports to their respective doctors. Virtual consultancy available. Orphanage patient maintenance.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Our EN – Bot allows the doctor to monitor, interact and helps in report maintenance It has inbuild camera that connect doctor and patients using GSM module without any smartphones or I-pods. No man presence needed

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

Statistics shows that over 2019 in India there were 69 thousand public and private hospitals were recorded. Of these 43 thousand were private sector. And most of the private hospitals are entering in to the advancement of medical field where they use IOT based monitoring system. As medical field grows then the advancement in the medical field also rush towards growth. So, it will create a icon for our product in the market

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

Providing Traffic-less Shortest Route for Emergency Vehicles through GPS Technology

Team Lead Name:

Manoj Kumar M K

Team Lead Email:

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Team Lead Phone:

7502506363

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Service,Business/Management Innovation

TRL LEVEL:

1

Theme:

Other Emerging areas Innovation for Startup,

Define the problem and its relevance to today's market / society / industry need:

1. During an emergency call, fire engines and Ambulance are unable to reach the destination on time due to heavy traffic on the roads. If a vehicle can't reach the desired destination within the time frame, it will risk the life of the victim and damage property. To solve the problem of heavy traffic by providing the traffic-less shortest route to reach the destination in a limited time and clearing the traffic for emergency vehicles.

Describe the Solution / Proposed / Developed:

Nowadays, we see heavy traffic in many rural, non-rural, and metropolitan areas. During emergency conditions, the fire engine and Ambulance cannot be reached in a limited time due to heavy traffic. To resolve the emergency, we use GPS technology to provide traffic-free short routes in a limited amount of time and send alert messages to vehicles ahead in order to arrive at the destination in the shortest amount of time.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

3. Here we use GPS technology and satellite communication to obtain the vehicle's position and provide information about the location of other vehicles ahead on maps by a dot representation during navigation. It also provides alert messages to the vehicles in the chosen path to pave the way for the ambulance and fire engine to reach their destination within a limited time by minimising the traffic during emergency times.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

Nowadays, on Google Maps, we can locate the shortest route but can't locate the traffic information. In the case of emergencies, ambulances and fire engines can't reach them because of heavy traffic on the roads. Hereby, we locate the other vehicles on maps with the help of GPS technology, providing the exact location of the vehicles through satellite communication, thus providing the shortest route and sending alert messages to the vehicles on the way ahead to reach on time.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

MOTOTRACKER

Team Lead Name:

Bhavan Shagar

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Team Lead Phone:

9384109323

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study Project

Innovation Type:

Process,Business/Management Innovation

TRL LEVEL:

2

Theme:

Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.,IoT based technologies (e.g. Security & Surveillance systems etc),Software - Mobile App Development,Software - Web App Development,

Define the problem and its relevance to today's market / society / industry need:

The Technology we created have great business in the financial based insurance policy company. For accidental insurance, claim the both party dealer as well as the users have beneficial way. In the marketing point of the term to the insurance based policy companies can have detail report of the users who claim the insurance. From adopting this software the companies can have clear vision on the accident details of the user to approve the policy fast.

Describe the Solution / Proposed / Developed:

While an accident occurs in the non ideal location they can be easily informed to the relatives and friends and also can get help from the nearby public services and can easily claim the insurance.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

#Can pass the information to the relatives #The data are managed by the users cloud account #Can claim the insurance in rapid way #we are activating the sensor using the lean angle position of motorcycle

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

This technology we proposed pass the information to the relatives and friends

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

MOTOTRACKER

Team Lead Name:

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Team Lead Phone:

9384109323

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study Project

Innovation Type:

Process,Business/Management Innovation

TRL LEVEL:

2

Theme:

Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.,IoT based technologies (e.g. Security & Surveillance systems etc),Software - Mobile App Development,Software - Web App Development,

Define the problem and its relevance to today's market / society / industry need:

The Technology we created have great business in the financial based insurance policy company. For accidental insurance, claim the both party dealer as well as the users have beneficial way. In the marketing point of the term to the insurance based policy companies can have detail report of the users who claim the insurance. From adopting this software the companies can have clear vision on the accident details of the user to approve the policy fast.

Describe the Solution / Proposed / Developed:

While an accident occurs in the non ideal location they can be easily informed to the relatives and friends and also can get help from the nearby public services and can easily claim the insurance.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

#Can pass the information to the relatives #The data are managed by the users cloud account #Can claim the insurance in rapid way #we are activating the sensor using the lean angle position of motorcycle

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

This technology we proposed pass the information to the relatives and friends

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

control systems for industry robots using gestures

Team Lead Name:

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Team Lead Phone:

7502506363

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product,Process

TRL LEVEL:

1

Theme:

Robotics and Drones, Smart Cities, Manufacturing,

Define the problem and its relevance to today's market / society / industry need:

Robots used in manufacturing facilities and autos are programmed to do a single task and cannot be used for multiple tasks. Each robot includes a control unit, which uses more energy and requires more maintenance, decreasing the system's effectiveness. We require an industrial to control each control unit, and the cost of the investment eventually goes up when manpower is used. Example : LR mat 200ip found and waste robot

Describe the Solution / Proposed / Developed:

We have developed a solution that employs gestures to operate machines with moveable parts in order to increase efficiency and introduce a chance in the use of machines. This gesture control unit is built to be portable and is built in such a way that it can adapt to different types of machines. This control system boosts productivity and lowers maintenance costs.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

*To operate machinery, using gestures. *Reuse of the same control units across various machines. *There is no expertise requirement to utilize the control units. *Reduces the expense of maintenance *portable and simple to store

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

Manufacturers like Mitsubishi Electric Factory Automation and Belden Automation have been producing automation services to automate industrial processes using robots, but these kinds of have the aptitude to be used in a way that is more efficient by converting automated machines into gesture control machines that can be reused and used efficiently.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

<https://youtu.be/aB1agbOOnvY>

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Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

EXOSKELETON POWER ARM

Team Lead Name:

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Team Lead Phone:

9445638716

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product

TRL LEVEL:

2

Theme:

Other Emerging areas Innovation for Startup, Defence & Security,

Define the problem and its relevance to today's market / society / industry need:

In today's situation the most of the soldiers have a requirement to move the items in the inventory and at the time of emergency the soldiers have to move in a fast way. So that they have to move heavy weights but due to emergency the availability of the soldiers, in this time our project helps the soldiers to move the objects and humans easily. It also helpful for rescue operation and it will be useful for NDRF. So by using our model we can reduce the manpower.

Describe the Solution / Proposed / Developed:

We developed a exoskeleton arm for the soldiers to lift weights more than their normal lifting capacity . The system consists of three pin rings supported by 8 maglev(magnetic levitation) cylinders. There are shoulder, elbow and a wrist pins supporting the parts of the hand . The maglev cylinders are particularly designed by us . It is used to lift the arm which supports the upper limb system so that it can easily lift the weights. The main principle we are using is the magnetic levitation.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

The exoskeleton power arm is used to lift the weights than a normal human capacity , up to this the robotic arms are used to support paralysed peoples are made up of hydraulic or pneumatic which accumulates more weight than their arm which makes them to put more effort to move the hand or other things. By applying the same to this concept will make this as a burden. But the magnetic levitation has reduced the weights and the use of valves and motors are completely avoided and reduces the weight.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

In today's market the exoskeleton arms available are using majorly hydraulic or pneumatic or motor driven system which makes them to build another setup to accommodate the required system supporting the exoskeleton arms working , which makes them to be heavier than we expected . As our project uses magnetic levitation we don't need the motors or the hydraulic systems as in the other products.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

no

Innovation Photograph:

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

BREATHEASE

Team Lead Name:

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Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Service

TRL LEVEL:

1

Theme:

Sustainable Enviroment,

Define the problem and its relevance to today's market / sociaty / industry need:

The air quality index is in the worst state in many countries. Due to the globalisation and due to COVID the production of many materials have boomed up and has shown us a huge problem in front of our naked eyes. Due to the burning of crop waste fog is produced. Due to the rubber industries, closed asbestos factories also contributes a lot in air pollution. Burning of wood, clothes, burning of plastic, medical, electronic and chemical wastes also created a need in tracking the air pollution level.

Describe the Solution / Proposed / Developed:

We have proposed an idea of creating an app which can track hazardous materials in air in a particular area of a kilometre or two. We can also detect the hazardous pollutants such as acrylic acid, NH₃, benzyl chloride, carbaryl, carbon tetra chloride, CO₂, CO, hydrogen sulphide, HCL, etc are released abundantly in air. Through this app, we can detect the ppm level, AQI index by assigning colours in the likes of green, yellow, red, black as perfect, adaptable, hazardous, most hazardous.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

This app notifies when there is a leakage of gases in the industries and alerts the citizens in and around the factory and the remedies will also be duly notified as a precautionary measure.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

We are different from other apps with the likes of notifying acrylic acid, NH₃, benzyl chloride, carbaryl, carbon tetra chloride, CO₂, CO, hydrogen sulphide, HCL etc than that of PM₁₀, PM_{2.5}, CO, NO₂, SO₂, O₃.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

3D Sensing Headlamp Switch

Team Lead Name:

Kabilan M

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Team Lead Phone:

9791865560

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study
Project

Innovation Type:

Process,Business/Management Innovation

TRL LEVEL:

2

Theme:

Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.,IoT based technologies (e.g. Security & Surveillance systems etc),ICT, cyber-physical systems, Blockchain, Cognitive computing, Cloud computing, AI & ML.,

Define the problem and its relevance to today's market / society / industry need:

In this product the automobile industries can have a great headlamp in there automobile in the state of advantage of AI

Describe the Solution / Proposed / Developed:

AVOIDING THE HIGH BEAM WHILE RIDING AT NIGHT USING AI .When the automobiles cross opposites the infrared camera, night vision camera analyses and the sensor detects the automobile. As the first step of detection, the beam flickering occurs at the fixed range of the detector. Next, with a close call of automobile detection the high beam changes to a low beam. After the automobile crossed the opposite automobile the sensor active the high beam back. This action takes place without the beam switch

Explain the uniqueness and distinctive features of the (product / process / service) solution:

In a further update to overcome with an AI project We use the infrared camera to find the front of the automobile. Night vision is used to have crisp and clear video images of automobiles. We proposed the advanced AI technology to implement this action call The product uses the infrared camera to capture the crisp and clear footage in night to motive the AI to perform its best level. Three layer of camera sensors are used to recognize in night.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

This Technology uses the AI for recognize the objects in night. This product has a three layer of screening captured using the Camera. we additionally add the Infrared camera and night vision camera.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

An automatic side stand angle detector using sliding mechanism

Team Lead Name:

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Team Lead Phone:

8940639035

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product

TRL LEVEL:

2

Theme:

Defence & Security,

Define the problem and its relevance to today's market / society / industry need:

With the rapid urbanization and staggering growth of transport network like two wheeler vehicles, safety on the road and condition on the bike as emerged as inescapable priorities for us . Motorbikes are most prone to accidents due to fragile nature. Even though they are helpful unexpected encounters takes place due to carelessness and condition of the bike. Many motorcycle accident takes place due to the forgetting of proper lifting of sidestand and detachment of sidestand in the moving vehicle.

Describe the Solution / Proposed / Developed:

This product presents an automatic side stand angle detector using sliding mechanism. The design consists of a PIC micro controller which controls the spring mechanism; it prevents the movement of the motorcycle for ensuring safety. The detector uses embedded controller, Reed sensor, permanent magnet, buzzer, relay and TMR Angle sensor. The embedded controller detects the position of the sidestand, breaks the Ignition circuits of the motorcycle. In case of wrong position, the buzzer alerts the user.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

In our product we use PIC micro controllers ,as the performance of the PIC micro controller is very fast because of using RISC architecture, the power consumption is very less and programming is also very easy. The TMR Angle sensor detects the sliding of side stand in case of moving motorbike and gives Signal to the buzzer and the micro controller breaks the ignition circuit.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

The existing systems have proposed solution only for the automatic side stand when the user starts the bike but our product proposes solution for the sliding of side stand due to the unexpected flaws in the moving bike .

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

NIL

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

LANE DETECTION AND CAR DETECTION USING MACHINE LEARNING

Team Lead Name:

A A VISHVAA DARSHAN

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Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Service

TRL LEVEL:

2

Theme:

Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.,

Define the problem and its relevance to today's market / society / industry need:

We are developing artificial intelligence (AI)-based solutions to monitor drivers' behavior, identify unsafe driving practices, and eventually convert these patterns into scores. Lane-related actions, such as tailgating, unsafe lane changes, and cut-off tailgating, constitute an integral part of a driving assessment. We are exploring the latest tools and techniques for lane detection as part of our research. To establish a context, this blog orients you to the prevailing trends in.

Describe the Solution / Proposed / Developed:

These systems will quickly alert the driver if their vehicle should cross over the line dividing lanes, thereby helping to avoid an accident. Vehicle detection system spots overweight vehicles moving toward overhead obstacles, such as bridges, tunnels and other structures, and it warns drivers individually.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

1.Easily Affordable 2.Easy to Use. 3.Available To Everyone 4.Artificial Intelligence Powered 5.Has High market value

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

1.Best User Interface Compared to others 2.Provides Better Accuracy 3.Easy to Use 4.Compatible in every platform

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

Use of digital technology or making physical prototype for micro irrigation system to improve water efficiency

Team Lead Name:

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Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study Project

Innovation Type:

Product,Service

TRL LEVEL:

1

Theme:

Agriculture & Rural Development, Waste Management/Waste to Wealth Creation, Clean & Potable water, Renewable and affordable Energy, IoT based technologies (e.g. Security & Surveillance systems etc), Software - Mobile App Development, Software - Web App Development, Smart Cities, Sustainable Environment,

Define the problem and its relevance to today's market / society / industry need:

Our country mainly depends on agriculture. In recent years a micro irrigation system is used Particularly in which drip irrigation has 90% of efficiency but the disadvantage are clogging up easily and poor water distribution uniformity compared to other emitter types. For this automated drip irrigation system is used . Which wastage of water is controlled by collecting the data from soil moisture sensors.

Describe the Solution / Proposed / Developed:

Depending upon the crop a sufficient amount of water is supplied. Farmers can have access to the flow of water through the GSM module and can get irrigation status through controls the AC power supply, triggering immediate shutdown off irrigation system. By using diesel fuel

Explain the uniqueness and distinctive features of the (product / process / service) solution:

In case of unpredictable rains, a wireless raindrop sensor detects rain and directly controls the AC power supply triggering shutdown of irrigation system. By using Diesel fuel there is more or less 82.1% of carbon emission takes place and the cost is also high. Our system is a customized design, depending on the farmer's field we would install the requirements. The above proposed system is based on well monitored system that helps in on time watering of plants cuts down electric energy.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

Here all the electronic devices are powered with solar panels. If the farmer wishes to change his pump , we would insist to install solar pump which reduces the need for using non renewable energy source.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

wellness storage unit

Team Lead Name:

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9514309587

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product,Process

TRL LEVEL:

2

Theme:

Software - Web App Development,Smart Education,

Define the problem and its relevance to today's market / society / industry need:

current healthcare needs to be improved because it is based on old data storage, upgrading and improving existing medical system can be made by introducing smart cards and related software application

Describe the Solution / Proposed / Developed:

to maintain paperless records of patients using smart card

Explain the uniqueness and distinctive features of the (product / process / service) solution:

to create easy and secure access in hospitals and linked units and viewed by other hospitals using smart cards

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

gather information related patient record ,design the software ,convert software into smart card ,update information and store patients details, implement the smart card

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

EV charge station finding app and battery level indicator

Team Lead Name:

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9080096877

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study
Project

Innovation Type:

Product,Business/Management Innovation

TRL LEVEL:

2

Theme:

Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.,IoT based technologies (e.g. Security & Surveillance systems etc),Software - Mobile App Development,

Define the problem and its relevance to today's market / society / industry need:

With some great features and functionalities we expect to get many EV on the market in future. The raising demand for EV increases the needs for charging stations and station locator app also increases. So if we are planning to create such an app to meet user expectations and win the competition.

Describe the Solution / Proposed / Developed:

The arrival of electric vehicles is the most significant initiative towards going green and making our environment cleaner. With the constant evolution in automotive industry, the EV market has experienced a massive development over the past decade. And the growing demand for a greener environment has raised the need for creating EV charging station finder app. Due to over air pollution, soon the age of electric vehicle decade arrives.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Contact our chatbot for information about charging station,prices,location, pin type chargers,restaurants/groceries,restrooms/food courts etc. In case of any problems,select customer feedback in the chatbot and you will receive a text message to contact our R&D department.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

Contact our chatbot for information about charging station,prices,location, pin type chargers,restaurants/groceries,restrooms/food courts etc. In case of any problems,select customer feedback in the chatbot and you will receive a text message to contact our R&D department.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

SMART TROLLEY (Fully automatic trolley with smart payment)

Team Lead Name:

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9159521334

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Service

TRL LEVEL:

1

Theme:

Robotics and Drones.,Software - Mobile App Development,

Define the problem and its relevance to today's market / society / industry need:

Shopping is simple but waiting on a bill counter makes shopping too boring and a tedious task. Huge amount of rush plus cashier preparing the bill with barcode scanner is too time consuming and results in long queues. The usual process of travelling the trolley is done manually by the human with the effort of his/her. If a customer carries a baby while shopping it is a real burden to the customer to push the trolley or to a disable person with one hand is almost impossible to push the trolley.

Describe the Solution / Proposed / Developed:

This innovative project consists of an automated billing system which can be placed within the shopping trolley. This system consists of a RFID reader. Whenever the shopper puts any product in trolley it is detected by the RFID module and is displayed on LCD along with the price of the product. As the shopper goes on adding products, all products are detected by the module and the price will increase accordingly. If customer do any changes trolley automatically change the list of product.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

It is AI based smart trolley with most advanced features. This system helps in achieving a faster billing system. It helps buyer to know the bill details in advance so that they can plan accordingly in affordable prices. Intimates about the current offers present by showing a pop-up in trolley screen. Helps in business promotions for the supermarkets by gaining more customers providing quickservice. Easy to use and does not need any special training. Introduction of AI increases profit for sellers.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

In Normal Trolley, It does not have any automation to calculate the product and product price, also it does not move automatically. In Automation Trolley of Supermarket, at end of shopping the shopper will press the button which when pressed adds all product along with their price and gives the total amount to be paid. At exit for verification the shopkeeper can verify the products purchased with the help of master card. Hence this technique is an appropriate method to be used in supermarket.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

PORTABLE SMART PACKAGING SYSTEM WITH QUALITY CHECK FRAMEWORK

Team Lead Name:

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9894810690

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Research Assignment/Industry Sponsored Project

Innovation Type:

Product,Service,Market Place,Business/Management Innovation

TRL LEVEL:

2

Theme:

Agriculture & Rural Development, Food Processing/Nutrition/Biotech, IoT based technologies (e.g. Security & Surveillance systems etc), Manufacturing, Consumer Goods and Retail,

Define the problem and its relevance to today's market / society / industry need:

Our society deals with an insignificant role of the small scale industries and local vendors. One among them is liquid product industries. Most of the products are wasted or not able to be consumed properly due to unfair packing and during the transmission made by them. Here they must get proper packaging unit that satisfy their need as well as efficient and profitable.

Describe the Solution / Proposed / Developed:

Here to solve the above problem, we came across an idea of developing a fully automated packaging machine designed specially for small scale industries with quality check framework. We developed this machine with basic technology and hardware stuff that is easily available in market. It is user friendly which can be accessed by all. The advantage of this machine to customer is that, they get assurance of buying good quality product and the vendor who buys the machine gets benefits that it is fully

Explain the uniqueness and distinctive features of the (product / process / service) solution:

The uniqueness of our project is it is portable, very affordable cost, light weight, less usage of current (running voltage 180-220) and fully automated. Here we include the quality check framework by which we can separate the product and pack them according to their quality. We also have a storage unit in it where we can store the data of the product packs that is displayed in the display unit inbuilt in it and can retrieve those data with any external device like USB also. The statistics can be

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

The similar product to our idea is not in market now. The maximized and advanced system of this is in existence which is only for large scale industries. There is no need to transport the product from rural areas by which the expense of transport is avoided. The local vendors themselves can sell their product directly to the consumer by which we can enhance the economy of them. By this the customer also can get assurance on quality of the product. As this is fully automated, there is no much bur

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

Civil Cart

Team Lead Name:

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7708948164

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study Project

Innovation Type:

Service

TRL LEVEL:

1

Theme:

Software - Mobile App Development, Consumer Goods and Retail,

Define the problem and its relevance to today's market / society / industry need:

The construction sector is one of the largest in the world economy. The delivery of the project is largely affected by the delay in procuring the materials.

Describe the Solution / Proposed / Developed:

We works between the customer and seller by Product showcase, Quality assurance of the materials and Door to Door services (logistics). And also we host the profiles of human resources (skilled & unskilled) in every region with their current job status. We also provide refurbished materials , machinery for constructions and miscellaneous works (interior, exterior services and consultancy).

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Unverified sellers No proper customer care No door to door delivery No real time stats Only in Metropolitan cities No ratings

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

On time delivery Give real time stocks Available in remote locations

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

Brick of Battle

Team Lead Name:

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9361747640

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Academic Research Assignment/Industry Sponsored Project

Innovation Type:

Product

TRL LEVEL:

1

Theme:

Mining, Metals, Materials,

Define the problem and its relevance to today's market / society / industry need:

The cost of normal bricks are rapidly increasing day by day. Also the natural resources(red soil) are reduced.

Describe the Solution / Proposed / Developed:

Trust issue: one of the most important way to gain trust of customer is through customer service. It demonstrates customers interests and there will be no trust issue.

Product can be proved by making their first impression as best as well as in good quality

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Conservation of natural resources Reduction of fly ash (as per quantity, cost of fly ash) To achieve strength in bricks Low water absorption To effectively use the ash from sewage water treatment plant for preparing the fly ash bricks by partially replacing the fly ash by sludge ash Cost reduction of sludge ash brick compared to fly ash brick in the market As per manufacturing wise, fly ash powder usage is reduced and it cost is saved

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

The objective of this project is to effectively use the ash from sewage water treatment plant for preparing the fly ash bricks by partially replacing the fly ash by sludge ash

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

"PROXY PI"

Team Lead Name:

AKILAN.S

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9486731745

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product

TRL LEVEL:

1

Theme:

Other Emerging areas Innovation for Startup,

Define the problem and its relevance to today's market / society / industry need:

We probably use Wi-Fi Router everyday, For everything from streaming to banking. So it is important to make sure its secure. Because the router is the gateway between your device and internet. Anyone with access to it can exert a significant amount of control, which is left unchecked could cause a lot of problems. Anyone connected to the wifi network and capture the wireless signal data. once a hacker hijack the data and use it for unscrupulous purpose

Describe the Solution / Proposed / Developed:

In order to reduce the paramount problem of network trafficking we use raspberry pi as wireless internet supply and for secure purpose TOR methodology is infused here. in this tor the data packets travel from one node to another node the data encryption is done consecutively. If hacker hack any one node the flow of data packets sensed and diverted to the another path to the reciever. the fire wall infused here is to customized the login credentials and avoid adult content.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

We use thor methodology that provide layer by layer protection it encrypted the data when it travel from one node to another node. the firewall infused in this raspberry pi will customized the webpage and avoid the adult content.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

We under gone the prospective way of handling the tor methodology. by customising the fire wall we have a control of secure data.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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Innovation Photograph:

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

Innovation for Drowsy Truck Driver

Team Lead Name:

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Team Lead Phone:

9360655644

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product

TRL LEVEL:

1

Theme:

Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.,

Define the problem and its relevance to today's market / society / industry need:

While we do only one quarter of our driving at night, 50% of traffic deaths happen at night. More than 42,000 people were killed in truck crashes in 2022, according to Injury Facts. The main reason behind this is Drowsiness of the Truck drivers. Drowsiness is the result of extreme tiredness which is basic human nature. Our Idea focuses on reducing these accidents

Describe the Solution / Proposed / Developed:

We have an idea for avoiding these accidents. If there is no response by the driver for 20 seconds, there will be an alarm produced. This acts as the first alertness to the driver alert, an alert message is shown on the EC system in next 10 seconds. If he doesn't respond even to the message the truck automatically parks on the last lane of the road within 5 seconds.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Touch sensor is the sensor which helps the EC system to find that the driver is feeling sleepy. The introduction of GPS and CRM Auto-dialer, the information that the Truck has been stopped is provided to the owner of the Truck which further reduces the loss of the goods in the truck with valid information. The reduces unnecessary traffic jams, economic loss due to delayed delivery of the load.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

The presence of the Front and Rear camera (AI authorised) will help to park the truck on the last lane of the road by checking the vehicles moving around which avoid these accidents. IOT which controls the accelerator and break of the truck. Gibon Electronic siren helps to provide the first alert by alarming.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

Innovation for Drowsy Truck Driver

Team Lead Name:

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Team Lead Phone:

9360655644

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product

TRL LEVEL:

1

Theme:

Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.,

Define the problem and its relevance to today's market / society / industry need:

While we do only one quarter of our driving at night, 50% of traffic deaths happen at night. More than 42,000 people were killed in truck crashes in 2022, according to Injury Facts. The main reason behind this is Drowsiness of the Truck drivers. Drowsiness is the result of extreme tiredness which is basic human nature. Our Idea focuses on reducing these accidents

Describe the Solution / Proposed / Developed:

We have an idea for avoiding these accidents. If there is no response by the driver for 20 seconds, there will be an alarm produced. This acts as the first alertness to the driver alert, an alert message is shown on the EC system in next 10 seconds. If he doesn't respond even to the message the truck automatically parks on the last lane of the road within 5 seconds.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

Touch sensor is the sensor which helps the EC system to find that the driver is feeling sleepy. The introduction of GPS and CRM Auto-dialer, the information that the Truck has been stopped is provided to the owner of the Truck which further reduces the loss of the goods in the truck with valid information. The reduces unnecessary traffic jams, economic loss due to delayed delivery of the load.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

The presence of the Front and Rear camera (AI authorised) will help to park the truck on the last lane of the road by checking the vehicles moving around which avoid these accidents. IOT which controls the accelerator and break of the truck. Gibon Electronic siren helps to provide the first alert by alarming.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

NIL

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

FitLife

Team Lead Name:

Mitun Suresh

Team Lead Email:

mitun.psna@gmail.com

Team Lead Phone:

6380622770

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study Project

Innovation Type:

Product,Service,Market Place,Business/Management Innovation

TRL LEVEL:

2

Theme:

Healthcare & Biomedical devices, Food Processing/Nutrition/Biotech, Software - Mobile App Development, Software - Web App Development, Sports & Fitness,

Define the problem and its relevance to today's market / society / industry need:

Modern Day lifestyle with its busy schedules of individuals impacts the physical and the mental health of the society. These busy schedules leads to health related problems. The individuals doesn't plan their diet with respect to their BMI. Some of the individuals lack the resources to hire a gym trainer, dietitian and a yoga tutor separately. Even though an individual hires the above mentioned three the transfer of health knowledge is not assured. Thus making the society unhealthy

Describe the Solution / Proposed / Developed:

The primary goal is to provide the users with diet plans, exercise plans, yoga plans, medication reminders, Water reminders which are completely adaptive to every user with accordance to their Bmi. The secondary goal is to ensure the proper monitoring of the exercises and the yoga exercise and correcting the body postures of the user. The final goal is to provide the users about the proper know ledge of fitness. Thus the aim is to provide all the above mentioned criteria with respect to the Bmi

Explain the uniqueness and distinctive features of the (product / process / service) solution:

All the existing applications only concentrates in providing exercises based on random stuffs which are very injurious. The food diet application try to calculate the calories consumed from the users inputs. The yoga applications doesn't provide the right yoga exercises. Also these applications lack monitoring systems to ensure whether these exercises are done properly. Thus our application tracks the body posture of the user with live feed from the user's camera and corrects them. Thus we stand out

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

The mobile application generates food diet with respect to the bmi of the user. All of the exercises, yoga, meditation and the food diets are inter related with each other. The application also posses monitoring systems to monitor and regulate the exercises. Women centric features like menstrual recommendations and the recommendations altering is also an unique feature. The application also awards merchandise for the users if they manage to follow the recommendations properly. Thus motivating too

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

**Institute Name:**

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

RASPBERRY PI STORAGE RETENTION

Team Lead Name:

AJITHKUMAR.R

Team Lead Email:

ajithkumardgl2002@gmail.com

Team Lead Phone:

9789542944

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product

TRL LEVEL:

1

Theme:

Other Emerging areas Innovation for Startup,

Define the problem and its relevance to today's market / society / industry need:

In private servers, they are connecting to the wired network. LAN(local area network) traffic increased. It can be hacked. Heavy use of NAS will clog up the shared LAN, negatively affecting the users on the LAN.

Describe the Solution / Proposed / Developed:

Centralizing your file storage also improves security and reduces the chance that files will go missing. You can easily set up file access permissions on NAS that will ensure only those that have proper authority can access a given file or folder. . NAS provides a very affordable option for both homes and small businesses for private cloud storage of files. Access is also made to be user-friendly and usually involves a web-based interface to make file access uncomplicated.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

We used BITDEFENDER for prevention of e-threats. BITDEFENDER is the global leader in the CYBER-SECURITY. We can access the resources whenever and wherever we want. Multiple devices can have access to the same files at the same time. Openmediavault is primarily designed to be used in small offices or home offices. This vault that acts as software storage.

How your proposed / developed (product / process / service) solution is different from similar kind of product by the competitors if any:

Value proposition : Cannot be easily hacked. Access anywhere. There is no need for cloud storage.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

MICRO BOT WITH BIO SENSOR

Team Lead Name:

VIDYA RAANI.R

Team Lead Email:

vidyaraanir25@gmail.com

Team Lead Phone:

9363392529

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Service

TRL LEVEL:

1

Theme:

Robotics and Drones.,IoT based technologies (e.g. Security & Surveillance systems etc),Defence & Security,

Define the problem and its relevance to today's market / society / industry need:

Recently in Tamil Nadu Sujith Wilson got stucked under the borewell pit for about 80 hours and died.Also,in Nellai quarry 6 employees got stucked under the ground about 300 feet.In these critical circumstances humans cannot enter under the ground to rescue them.

Describe the Solution / Proposed / Developed:

For the above problem statement,micro bot can enter inside the pit to examine health conditions using bio sensor and constant surveillance of a victim by live streaming.

Explain the uniqueness and distinctive features of the (product / process / service) solution:

It uses bio sensors like temperatue sensor,spo2 sensor. It also records with 360 degree resolution camera. It also tracks the position of the bot using GPS.

How your proposed / developed (product / process / service) solution is different from similiar kind of product by the competitors if any:

Only a camera with driver motor is sent under the pit not the controller.So,it does not cause any damage to the controller and also it is very compact.

Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

Yes

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Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL MOE'S INNOVATION CELL

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Team Lead Email:

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Team Lead Phone:

6380622770

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Independent Assignment/Non-academic Study Project

Innovation Type:

Product,Service,Market Place,Business/Management Innovation

TRL LEVEL:

2

Theme:

Healthcare & Biomedical devices, Food Processing/Nutrition/Biotech, Software - Mobile App Development, Software - Web App Development, Sports & Fitness,

Define the problem and its relevance to today's market / society / industry need:

Modern Day lifestyle with its busy schedules of individuals impacts the physical and the mental health of the society. These busy schedules leads to health related problems. The individuals doesn't plan their diet with respect to their BMI. Some of the individuals lack the resources to hire a gym trainer, dietitian and a yoga tutor separately. Even though an individual hires the above mentioned three the transfer of health knowledge is not assured. Thus making the society unhealthy

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The primary goal is to provide the users with diet plans, exercise plans, yoga plans, medication reminders, Water reminders which are completely adaptive to every user with accordance to their Bmi. The secondary goal is to ensure the proper monitoring of the exercises and the yoga exercise and correcting the body postures of the user. The final goal is to provide the users about the proper know ledge of fitness. Thus the aim is to provide all the above mentioned criteria with respect to the Bmi

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Is there any IP or Patentable Component associated with the Solution?:

No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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Team Lead Phone:

9789542944

Team Lead Gender:

Male

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Product

TRL LEVEL:

1

Theme:

Other Emerging areas Innovation for Startup,

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No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

No

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

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INSTITUTION'S INNOVATION COUNCIL
MOE'S INNOVATION CELL



Institute Name:

P.S.N.A. College of Engineering and Technology

Title of the Innovation/Prototype:

MICRO BOT WITH BIO SENSOR

Team Lead Name:

VIDYA RAANIR

Team Lead Email:

vidyaraanir25@gmail.com

Team Lead Phone:

9363392529

Team Lead Gender:

Female

FY of Development:

2021-22

Developed as part of:

Academic Requirement/Study Project

Innovation Type:

Service

TRL LEVEL:

1

Theme:

Robotics and Drones.,IoT based technologies (e.g. Security & Surveillance systems etc),Defence & Security,

Define the problem and its relevance to today's market / society / industry need:

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No

Has the Solution Received any Innovation Grant/Seefund Support?:

No

Are there any Recognitions (National/International) Obtained by the Solution?:

No

***Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Startup?:**

Yes

Registration Copy of Start-up / Enterprise Upload Photograph: [View File](#)

Had the Solution Received any Pre-Incubation/Incubation Support?:

No

Video URL:

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