

Robot Nurse for CFLTC Nattika

(12 Sept 2020)

Government engineering college Thrissur has implemented three projects in covid front line treatment center Nattika. The LULU-CFLTC nattika is the largest covid frontline treatment center in Kerala having a capacity of 1500 beds.

We have deployed six automatic Robot nurses in Cfltc Nattika . The project is funded by NABARD under Rural Infrastructure Promotion Fund (RIPF).

- The Automatic Robot nurse is an implementation of the Industrial Line follower. This Robot is capable of taking values like Temperature, pressure and SPO2 level of patients who are admitted in cfltc. It is the first time this kind of Robot is implemented in medical fields with automated controls with minimum human assistance which can cover large numbers of patients in a single stretch. The Robot can work in shifts three times a day to monitor patients which can cover about 250 patients in a shift. The doctors can communicate with patients using the telemedicine feature implemented in Robot. The Robot can reduce the workload on medical staff in monitoring the patients and chance of infection. The Robot is able to know whether a patient is active in a bed or not by fetching active bed details from patient management software. The patient status, values and details are transferred in realtime to the control center. Robots are deployed in each section having patient strength of 200 in cfltc. The robots can interact with patients and their needs can be communicated with the control center. Each Robot is deployed in a section having 200 beds.



Video links:

<https://drive.google.com/file/d/1PYdLW2GpCWgVwWY7RX9YR1z0KI5BlSx-/view?usp=sharing>

https://drive.google.com/file/d/1PW3S7HqrYXEulf_mLStxWH_fP8NSUVvf/view?usp=sharing

<https://drive.google.com/file/d/1OxecD6WQjGLWs5z5FdZSq4ONI-Z2inV5/view?usp=sharing>

<https://drive.google.com/file/d/1PPFKgeQLoiHbhvqkiKtqjOilM6S2ajNH/view?usp=sharing>

Newspaper links:

COVID INNOVATION

Engineering students develop assistive robots to aid healthcare workers

• Stenli Simon

Healthcare workers on the frontlines in the battle against Covid-19 are not only at a higher risk of getting infected but also in spreading the same to their families. To help reduce the risk, a group of engineering students have come up with socially assistive robot nurses.

Designed and developed by Sourav P.S., Ashwin Kumar K., Tony C. Abraham, Ajay Aravind and Sidharth V., students of Government Engineering College, Thrissur, under the guidance of Ajay James, assistant professor, the project has been funded by National Bank for Agriculture and Rural Development (Nabard) under the Rural Infrastructure Promotion Fund (RIPF).

"Healthcare workers are highly exposed to the virus while assisting patients at hospitals and Covid treatment centres. The automatic robot nurses

will not only help in checking the temperature, pressure and SpO2 level of patients admitted but also reduce the risk of healthcare workers being exposed to the virus," said Ajay James, assistant professor at GEC, Thrissur.

Six automatic robot nurses have already been deployed at the largest Covid First-Line Treatment Centre (CFLTC) recently inaugurated at

Nattika, Thrissur, with a 1,400-bed facility. "Such a robot with minimum human assistance attending to a large number of patients is being implemented for the first time in the medical field," said Ajay.

How it works

The automatic robot nurse is derived from the 'Industrial Line Follower Robot'. It can work in shifts three times a day

to monitor patients and can cover 250 patients in a single shift. Doctors can communicate with patients using the telemedicine feature embedded in the robot. The robot also detects whether a patient is active in a bed or not. The patient's current health status, the value of readings and details are transferred in real-

time to the control centre. The robots can interact with patients and their needs can be communicated with the control

centre.

A team of students comprising Kowsik Nandagopan, Irshad P and Arun Jishnu have developed a management software for efficient bed allocation and patient management. The features include a pictorial

E-bike at CFLTC

An e-bike has also been developed by Muhammed Arif, Evin Wilson, Gilaz George and Pranav Balachandran, another group of students from the same college. The e-bike is a manned vehicle which can carry food and other materials to stations inside the CFLTC. Around 100kg can be carried in a single ride thereby ensuring efficient transportation and distribution of food to patients in minimum time. The bike is electric, thereby making it pollution-free.

The team behind Automatic Robot Nurses developed in association with Nabard



Home > Cities > Kochi

Engg students develop assistive robots to aid health workers

Healthcare workers on the frontlines in the battle against Covid-19 are not only at a higher risk of getting infected but also in spreading the same to their families.



Published: 11th September 2020 04:43 AM | Last Updated: 11th September 2020 04:11 PM



The team behind Automatic Robot Nurses developed in association with Nabard.

By Steni Simon

Express News Service

KOCHI: Healthcare workers on the frontlines in the battle against Covid-19 are not only at a higher risk of getting infected but also in spreading the same to their families. To help reduce the risk, a group of engineering students have come up with socially assistive robot nurses. Designed and developed by Sourav P S, Ashwin Kumar K, Tony C Abraham, Ajay



Latest

- Supreme Court rejects plea seeking postponement of UPSC prelims 2020
- Amitabh Bachchan reveals he is a pledged organ donor
- Online threats: HC directs police to ensure security of Mohammed Shami's wife Hasin Jahan
- Amazon India creates over one lakh seasonal job opportunities ahead of festive season
- I'm brown, extremely happy about it: Suhana Khan calls out trolls on colour bias
- Approach Centre first: HC declines to entertain PIL against Twitter over anti-India tweets

More From The Section

- COVID centre erupts into Nikah celebration in Kochi's Mattancherry
- Smart City Mission to intensify flood mitigation drive
- Separated by Covid curbs, Kudumbashree members meet virtually
- Nettoor murder: An affair and a lift culminated in brawl

News links:

<https://www.thehindu.com/news/national/kerala/robot-nurses-to-care-for-patients-at-nattika-covid-19-centre/article32651262.ece>

<https://www.newindianexpress.com/cities/kochi/2020/sep/11/engg-students-develop-assistive-robots-to-aid-health-workers-2195184.html>

<https://timesofindia.indiatimes.com/city/kochi/kerala-robotic-nurses-take-charge-at-nattika-fltc/articleshow/78179196.cms>

<https://malayalam.oneindia.com/news/thrissur/robot-nurses-and-e-bikes-to-deliver-food-curiosities-at-lulu-cfltc-262541.html>

<https://malayalam.samayam.com/local-news/thrissur/robotic-nurses-and-ebike-facility-in-thrissur-nattika-lulu-covid-first-line-treatment-centre/articleshow/78190212.cms>

<https://www.madhyamam.com/kerala/local-news/thrissur/robotic-nurse-at-lulu-cfltc-572141>

<https://theindianpractitioner.com/2020/09/21/patients-at-keralas-nattika-covid-centre-to-be-attended-by-robot-nurses/>

<https://thedailypodium.com/robot-nurses-to-take-care-of-sufferers-at-nattika-covid-19-centre/>

Public Relations department post:

<https://www.facebook.com/2483632581704436/posts/3507921732608844/>

Testimonial videos:

Chief minister of Kerala mentioned about the work during inauguration of CFLTC

https://drive.google.com/file/d/1LpL_BQ6gaD-EUsZWhOwKdkuP7TbVZmJO/view?usp=sharing

00:52 to 01:28 ----- mentioned about our works and congratulated us

District program manager, Arogyakeralam National Health Mission

Dr. Satheesan

<https://drive.google.com/file/d/1fLRSaKaBcvLHMHsjc8ImuP4z3wWVLRgb/view?usp=sharing>

Nodal officer LULU-CFLTC Nattika

Dr. Rahul

https://drive.google.com/file/d/1BDt2WfKH7q_tQaiQ03McMEEF1KOnXXDW/view?usp=sharing
