STUDENTS PROJECT CONTEST

Sethu Institute of Technology, Pulloor, Kariapatti – 626 115. Tamil Nadu.

1

Smart India Hackathon Software Edition 2022,held at Manipal University,Jaipur

Students teams- Department of IT participated and presented in the Grand Finale of Smart India Hackathon Software Edition 2022 and Won First Prize and Cash Award of Rs.1, 00, 000/- for the Complex Problem Statement "Suggest a solution to help municipal bodies maximize solid waste" under Ministry of Ministry of Housing and Urban Affairs held at Manipal University Jaipur. Under the guidance of Dr. S. Siva Ranjani,Dr S.Rathnamala and Dr C.Parameswari.

Problem Statement	Solid Waste Management System
Solution	To suggest a solution to help municipal bodies maximize solid waste
Problem Solving Technology	Mobile application and web application

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ELECTROBLITZ protothan contest 2022

Mr.S.Manobala and Mr.M.Manoj, UG Graduates, Department of ECE presented their project and won first prize in ELECTROBLITZ protothan contest in 2022 for their idea in Healthcare – Femcare: Wearable Prenatal Monitoring Device under the guidance of Dr.R.Tamilselvi, Prof / ECE and Dr.M.Parisa Beham,Prof / ECE.

Problem Statement	The prevalence of birth defects in India is 6- 7% which translates to around 1.7 million birth defects annually. Between 1997 to 2021, nearly 1.5million maternal deaths are occurred in India.
Solution	Need for a device which can be used to monitor a pregnant lady throughout the gestation with minimal cost
Problem Solving Technology	Signal and Image Processing

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Smart India Hackathon Software Edition 2022,held at IIT ROORKEE, Uthrakhand

Student team members of MECH and ECE Departments presented their project and who won as Second Runner and CASH PRIZE of Rs.50,000/- in SMART INDIA HACKATHON 2022 Hardware Edition Grand Final held at IIT ROORKEE, Uthrakhand. Under the guidance of Dr. Dr. M.Parisa Beham Prof & Head / ECE,Dr. R.Tamilselvi, Prof & PG Head / ECE and Mr. J.Vairamuthu, Asst Prof / Mech

Problem Statement	The tyre burst or tyre bow out causes due to under inflated tyres
Solution	To develop an automatic air inflation system used to maintain the pressure in the tyres of the vehicles in running condition and maintain tyre pressure in the event of puncture.
Problem Solving Technology	Automobile and IoT

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Beatrix 2021 One day hackathon

P. Amarnath and R. Dhayanithi UG Graduates, Department of EEE presented their project and won Second prize and Cash Award of Rs.8,000/- in Beatrix 2021 One day hackathon for their idea "AR Tourist Guide and Navigation System" under the guidance of Dr. S. Vijayarajan Asso Prof / EEE and Mrs. V. Vaishnavi Ass Prof of / EEE.

Problem Statement	To promote Madurai Tourism
Solution	To develop AR Tourist Guide and Navigation system
Problem Solving Technology	IOT

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H-Social Creator 2021 award

Mr.S.Manobala and Mr.M.Manoj, UG Graduates, Department of ECE received H-Social Creator 2021 award for their idea in Healthcare – Femcare: Wearable Prenatal Monitoring Device organized by „Hundai Motor India's CSR arm Hyundai Motor India Foundation". The project mentors are Dr.R.Tamilselvi, Prof / ECE and Dr.M.Parisa Beham, Prof / ECE.

Problem Statement	Almost 15% of all pregnant women can develop potentially life threatening complications. As a result the pregnancy become high risk and it leads to abnormalities of mother and fetus or pre-term birth or abortion
Solution	Provide a prenatal monitoring device for mothers with a high-risk pregnancy streamlines the process and reduces the time, cost, and effort required, improving the overall prenatal care experience.
Problem Solving Technology	Signal and Image Processing

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Student innovation contest TNSI 2021

Mr.S.Manobala and Mr.M.Manoj, UG Graduates, Department of ECE winning a grant of Rs.1,00,000 for their project "Femcare" in the student innovation contest TNSI 2021 at the Final pitching held at TAG Auditorium, College of Engineering, Anna University,Chennai under the guidance of Dr.R.Tamilselvi and Dr.M.Parisa Beham.

Problem Statement	Pregnancy is a crucial period for every woman. Without proper care they may face huge risk during gestation. The prevalence of birth defects in India is 6-7% which translates to around 1.7 million birth defects annually. Congenital anomalies (i.e. birth defects) are the major cause of new born deaths within four weeks of birth and can result in long-term disability.
Solution	To propose a system to detect fetal stress condition by measuring FHR and breathing movements from FECG signal.
Problem Solving Technology	Signal and Image Processing

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WEECARE in2021

        Ms. S.K.Gayathri. and Ms.M.Bharkavi Sandhiya bagged First and Consolation prize in i4C Blogathon for the project of Medirobo & WEE CARE in 2021 under the guidance of Dr.R.Tamilselvi, Prof / ECE and Dr.M.Parisa Beham, Prof / ECE.

Problem Statement	COVID patients due to their illness and loneliness need some persons to take care of them regularly to make them comfortable.
Solution	To develop a low cost medical robot to assist elderly people for their medical assistance
Problem Solving Technology	Arduino and IoT.

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ACHIEVEMENTS 2020-

Title : Medismart

The Project is incorporates contactless smart device for monitoring vital physiological parameters. The main aim of the project is to save time and cost using contactless checkup.

1. **Merlin Renaxy A**
   (Final Year BME)

2. **Juhie S**
   (Final Year BME)

3. **Ilayaprabhu R**
   (Final Year EEE)

Received Cash prize Rs.1,00,000

Ilayaprabhu R

Tamilnadu Student innovators, Project Contest 2020

Problem Statement	Monitoring vital physiological parameters
Solution	To develop smart device for monitoring vital physiological parameters
Problem Solving Technology	IOT

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Aarambam contest 2021

Mr.M.Venkat , Mr. John Benjamin and Mr. R. Vigneswran of Mechanical engineering department students had participated and won II prize in Arambam 7th edition contest organized by young Indians Madurai Chapter.

Problem Statement	Vehicle safety
Solution	Automatic air inflation system
Problem Solving Technology	Central Tyre inflation system

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Smart India Hackathon 2019, conducted by Ministry of Ayush at IIT Delhi

M. Mohamed Noohu Abbas, VI yr EEE S.B. Saravanapandiyan, IV yr EEE Abdullah Sahul Hameed, IV yr EEE S. Prithivirajan, IV yr EEE M. Dhivyameena, IV yr EEE M. Madhu Anandhi, IV yr EEE UG graduates, Department of Electrical and Electronics Engineering participated in the Grand Finale of Smart India Hackathon Hardware Edition 2019 and Won First Prize and Cash Award of Rs.75, 000/- for the Complex Problem Statement "Non Invasive Blood Glucose Monitoring" under Ministry of Ayush held at IIT Delhi

Problem Statement	To monitor Glucose level by using Non Invasive method
Solution	To develop Non Invasive Blood Glucose Monitoring device
Problem Solving Technology	IOT

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Aarambam Project Contest, held at Thiagarajar Arts College

Our students team won First prize and received a cash award of Rs.15, 000/- under the Aarambam Project Contest, held at Thiagarajar Arts College (2019), organized by Young Indian (Yi) Madurai Chapter and Native Lead Foundation under the guidance of Dr.R.Tamilselvi, Prof / ECE and Dr.M.Parisa Beham, Prof / ECE.

Problem Statement	Congenital anomalies (i.e. birth defects) are the major cause of new born deaths within four weeks of birth and can result in long-term disability. The neonatal mortality rate is the probability that a child born in a specific year will die during the first 28 days of life.
Solution	To automate the process involved in measurement of Biophysical Profile (BPP) parameters and to develop a portable, economic and miniaturized fetal stress monitoring device.
Problem Solving Technology	Signal and Image Processing

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DST-Lockheed Martin-Tata Trusts India Innovation Growth Programme (IIGP) 2.0

Ms.S.M.NaziaFathima bagged Winner award of Rs 10 Lakhs under the DST-Lockheed Martin-Tata Trusts India Innovation Growth Programme (IIGP) 2.0 - University Challenge 2019 titled "Low Cost BMD Device for Detection of Osteoporosis" under the guidance of Dr.R.Tamilselvi, Prof / ECE and Dr.M.Parisa Beham, Prof / ECE.

Problem Statement	Osteoporosis is a disease that causes compromised bone strength and an increased risk of bone fracture — particularly in older adults
Solution	To develop a low cost device for early stage detection of Osteoporosis
Problem Solving Technology	IoT

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