Kadi Sarva Vishwavidyalaya

Science & Technology Exhibition

**Date : 06/01/2023(Friday) & 07/01/2023 (Saturday) at Gandhinagar Campus**

**09/01/2023 (Monday) & 10/01/2023 (Tuesday) at Kadi Campus**

**(Exhibition Timings : 9am to 4 pm)**

Project Details Submission Date : **Latest By 30th December 2022**

to Mr. Rajat Patel on [**ksvsciencetechnology@gmail.com**](mailto:ksvsciencetechnology@gmail.com)

**The Details must be reach to us as per the given following format**

**Science (All Stream): Mentor Wise 1 Project**

**Engineering &Polytechnic: Department wise 1 Project**

**Pharmacy: 5 Projects**

**Nursing:3 Projects**

**Physiotherapy:3 Projects**

**Maximum 4 Students allowed Per Project**

The Specifications of the abstracts are given below:

1) **Title of the Model-** **Gaming Gesture Control**

2) **Authors' Name-**

**Student 1 : Dev Patel [20BECE30136] Student 2 : Kush Mevada [20BECE30092]**

**Student 3 : Vatsal Mavani [20BECE30090] Student 4 : Dishant Korat [20BECE30076]**

**Guide Name : Prof. Palak Parmar**

3) **Institute Name-** LDRP Institute of Technology & Research, Gandhinagar

4) **E-mail id of Presenting Author (Guide Only) –** palak\_ce@ldrp.ac.in

5) **Abstract-**

This project creates a simple game and controls the game using hand gesture recognition.

In this project, we’ll create a simple game and control the player movements using gesture detection. Two gestures are taken into consideration which are used to control the player movements and are captured by the gesture detection system. The gesture detection and data transmission is done by opencv and python.

By integrating AI as a control system for the gaming environment we can enable immersive gaming without the requirement for electronics. In this project We have made an AI based controller for a 2D game. This enables fine tuning of the movements. AI is used to capture gestures and use these gestures to control the movement of the player. All the game screens and score board are displayed using an SSD1306 OLED display.

In this project OpenCV and Mediapipe are used for gesture detection. We use gestures in this project for the Hill Climb movements. The gesture detection code will identify the landmarks of each finger and analyze the position of fingers.

**Available Resource in each stall:**

|  |  |
| --- | --- |
| No. of Tables : | 01 (4X2 ft table) |
| No. of Chairs : | 04 |
| No of Power Points : | 03 Electric Point (2 Plugs) |
| No. of Plain Curtain of Size 4 \* 6 | 01 |

* **In case of more than two electric point they will have to arrange their own extension board**
* **Apart from table, chair and electric point you have to arrange yourselves.**

**Note: Posters are not included in this Science & Technology Exhibition**

**For More details contact to Mr. Rajat Patel (Mobile : 94083 86685)**

Regarding School Visit Registration at Gandhinagar Campus (The details must be sent through mail to Dr. Rajeshri Patel on rajeshri.patel0417@gmail.com) : Latest by 30th December 2022.

* + 1. All SMMPISR - Science faculty has to register 2 Schools for the visits
    2. LDRP-ITR : 07 Schools
    3. VSITR Kadi : 02 Schools for Gandhinagar  & 03 Schools for Kadi Campus.
    4. VPMP Polytechnic : 05 Schools
    5. C M Patel College of Nursing : 05 Schools
    6. C M Patel College of Physiotherapy : 05 Schools
    7. K B Institute of Pharmacy : 05 Schools
    8. Note : HVHP & PSSDA Kadi will invite the schools to visit at Kadi Center.