

DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

PROJECT PROPOSAL

1. Project Title: -

Dynamic Hand Gesture Recognition using Neural Network

2. Project Scope: - (Max 500 words)

We are developing a system that will recognize the dynamic movements of hand and will then perform some tasks like typing, opening an app, drawing, etc. It has two features Virtual Keyboard and Virtual Mouse. In Virtual Keyboard, we can type anything anywhere. Virtual Keyboard is necessary in a computer/laptop as sometimes we have faced issues related to keyboard that some keyboard buttons are missing or some buttons don't work. In virtual Mouse, we can use our finger the same way as a mouse but virtually. The camera will detect the movements of hand and detect its actions and will response accordingly. Both Virtual Keyboard and Virtual Mouse features will help in better human – computer interaction and will improve user Experience.

3. Requirements: -

- ► <u>Hardware Requirements</u>
 - Laptop
- > Software Requirements
 - Python 3.8 64-bit
- ➤ Modules Requirements
 - Opency
 - Mediapipe
 - Autopy
 - Numpy

STUDENTS DETAILS

Name	UID	Signature
Pranjal Mohana	20BCS6756	
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APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)
Mr. Saurabh Singhal (E12800)	Supervisor	
Dr. Mahadev (E13868)	Co-Supervisor	