

Gesture Detection System using OpenCV

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Abstract: *In the rapidly evolving landscape of human-computer interaction, our project delves into the innovative realm of gesture detection technology. This study presents the development of a sophisticated Gesture Detection System, a responsive interface bridging the gap between human hand movements and digital actions. With the invaluable support of our project supervisor, Mrs. V. M. Khanapure, our project not only explores the intricate nuances of gesture recognition but also showcases the collaborative spirit of our team. Utilizing OpenCV and MediaPipe libraries, our system employs advanced computer vision algorithms for real-time hand tracking and precise gesture recognition. The project's success is not only attributed to the technical acumen of our team members but also to the seamless cooperation and encouragement among them. Furthermore, the availability of essential resources provided by Mr. V. Nitaware Principal, PLGPL, significantly bolstered our project development process. This abstract encapsulates a journey of collaborative innovation, highlighting the symbiotic relationship between technology and teamwork. Through this Gesture Detection System, we aim to redefine user experiences, offering an intuitive and interactive interface that responds to human gestures with precision and fluidity..*

Keywords: human-computer interaction

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