

# AI Virtual Mouse using Computer Vision and Media Pipe with Mobile Net Architecture

Ayisha Nadirsha<sup>1</sup>, Riyad A<sup>2</sup>, Harikrishnan S R<sup>3</sup>

Student, MCA, CHMM College for Advanced Studies, Trivandrum, India<sup>1</sup>

Assistant Professor, MCA, CHMM College for Advanced Studies, Trivandrum, India<sup>2</sup>

Assistant Professor, MCA, CHMM College for Advanced Studies, Trivandrum, India<sup>3</sup>

**Abstract:** *The AI Virtual mouse project is a challenge for individuals with physical disabilities and those affected by autism. This project presents an innovative solution: an AI Virtual Mouse, powered by computer Vision and the MobileNet architecture. This system not only improves accessibility but also addresses the pressing need for contactless and touchless interactions in a world increasingly concerned about health and hygiene. By using the MobileNet architecture, this system accurately interprets hand gestures to control cursor movements, eliminating the need for physical contact. Designed with accessibility in mind, the AI Virtual Mouse empowers individuals with physical disabilities and those affected by autism to navigate computers effortlessly, fostering greater independence and inclusion. The contactless nature of the interface also aligns with the increasing demand for hygienic solutions, minimizing the risk of germ transmission in public and personal spaces. This technology represents a significant advancement in the realm of accessible computing, offering a practical and intuitive alternative to traditional input methods.*

**Keywords:** Machine learning, Deep learning, Convolutional Neural Network, MobileNet Algorithm