

# Quad Chart

## Topic:

Investigating the applications of hand-gestural control in Remote Filmmaking.

Film, Human-Computer-Interaction, Computer Vision

## Ideas:

Natural and intuitive means of teleoperation that brings filmmakers closer to their craft

Continuous motion control proportional to user's hand motion

## Process:

Develop a remote filmmaking system using a skeletal-based computer-vision model to detect user's gestures and translate them into continuous automation of a film dolly

Conduct user studies to determine effectiveness of remote filmmaking system

## Conclusions:

Using the Mediapipe open source tool for skeletal-based computer vision yielded noise that affected the program's performance.

Users agree that hand gestures for controlling the robotic dolly felt natural, but the speed of dolly movement did not fully reflect the speed of their hand motion.