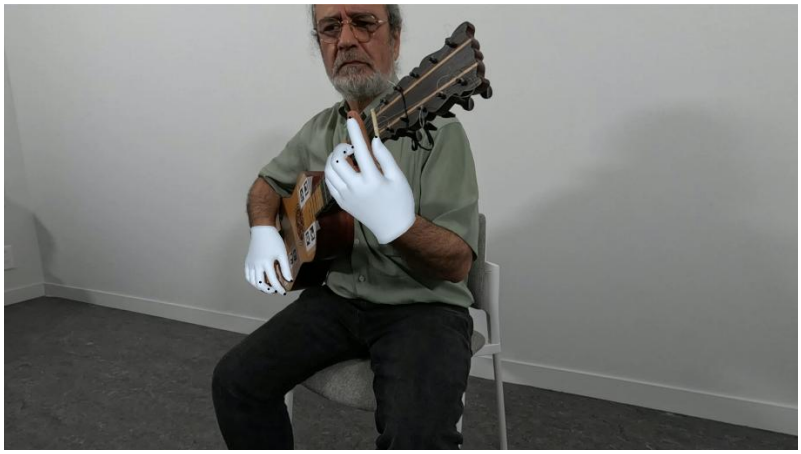
ANALYZING GUITARISTS' HAND MOVEMENTS USING COMPUTER VISION

IMLEX

GOAL

The project aims to investigate the use of computer vision methods to extract, analyze and visualize hand movements on a guitar.



HOW?

This project is focused on capturing and analyzing classical guitar performance using computer vision, with an emphasis on hand movement and guitar interaction. It will need to incorporate three-dimensional tracking of both the guitar and the performer's hands.

RESEARCH TOPICS ASSOCIATED

COMPUTER GRAPHICS

- 3D/XR Data visualization

COMPUTER VISION

- Hand tracking and pose estimation
- 3D objects tracking

AVAILABLE EQUIPMENT'S

- Quest 2/3/Pro, Vision Pro
- GoPro Hero 11/13

GO FURTHER

This project could be expanded to include different types of guitars.