

Handsfree GUI Controller based on OpenCV and PyAutoGUI

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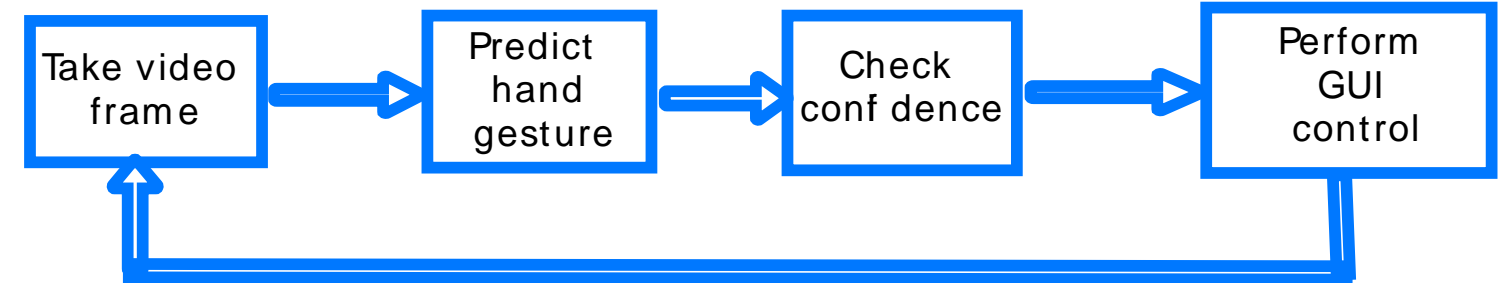
Soft Computing - E2-2018/2019

Problem Definition

Being able to control Your computer without touching it is the main purpose of this project. By showing certain hand gestures You can perform various commands.

Dataset: Manually collected data.

Pipeline



Used techniques

Morphology

Object
detection

PyAutoGUI

Conclusion and future work

Problems exist when You need to determine when to perform action on gui because repeated frame processing can create repeated gui actions.

Many improvements can be made in future including: Gesture personalization, hand tracking for mouse movement, gesture bindings etc.