**INTRODUCTION**

**HAR:**
- Human–human interaction
- Human–computer interaction

**Skeleton Base:**
- Reserve privacy
- Less storage without loss of key information

**Objective:**
- 3D SB–HAR from RGB surveillance camera video

**Feasibility of application in remote system**

**REFERENCES**


**RESULT**

**DATASETS**

| Human3.6M | 2D-3D skeleton lifting |
| NTU120 | HAR |
| Kinetics-400 | Chosen video validation |
| Customized Video | Application |

**Opt1:** Raw RGB Video

**Opt2:** Consecutive 2D Skeleton File

**Cut Into Sub-videos**

**VideoPose3D**

- **2D Skeleton 17 joints**

**MS-G3D Spatial-temporal Graph Convolutional Operator**

**List of Actions**

**STRIDED TRANSFORMER**

- Captures the long-distance timing information via VTE
- Aggregates the timing information output into the pose representation through STE

**Problem Addressed & Future Work**

- Key point detection noise & missing key points
- Video segmentation base on human action
- Detect half body / part of body action

**VideoPose3D**

- A fully convolutional model based on dilated temporal convolutions.
- High Accuracy
- Take 2D joints in COCO format as input and output 3D joints in Human3.6M format

**MS-G3D**

- GCN: Spatial-only
- TCN: Temporal-only
- Biased weight on principal joints with more connection
- Blocked dependency information cross time space
- Disentangled multi-scale aggregation: remove redundant dependencies
- G3D model: model spatial-temporal joint dependencies

**HAR:**
- Human–human interaction
- Human–computer interaction

**Skeleton Base:**
- Reserve privacy
- Less storage without loss of key information

**Objective:**
- 3D SB–HAR from RGB surveillance camera video

**Feasibility of application in remote system**

**REFERENCES**


**INTRODUCTION**

**HAR:**
- Human–human interaction
- Human–computer interaction

**Skeleton Base:**
- Reserve privacy
- Less storage without loss of key information

**Objective:**
- 3D SB–HAR from RGB surveillance camera video

**Feasibility of application in remote system**

**REFERENCES**

