## The Estimation of Missing Body Feature Points in Moving Images Using LSTM

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- **OpenPose** is OSS, able to extract body feature points in an image or moving images.
- There are cases where the feature point extraction fails because the body in moving images is shielded by objects or due to the image blurring.



## Approach & Solution

We propose a LSTM-based feature point estimation model.

(1) Get feature point coordinates from the frame before loss Coordinate Approach Division into parts Body: Leg: Coordinate data Coordinate data Coordinate data Coordinate data (3) Convert to relative coordinate data Head: relative Arm: relative Leg: relative Body: relative Coordinate data Coordinate data Coordinate data Coordinate data (4) Estimation by LSTM Estimated relative coordinate data

(5) Convert to coordinate data

coordinate data

## Evaluation

We evaluate the proposed model by estimating missing feature points in a walking video. the proposed solution has a strong impact to reduce the estimation error.

