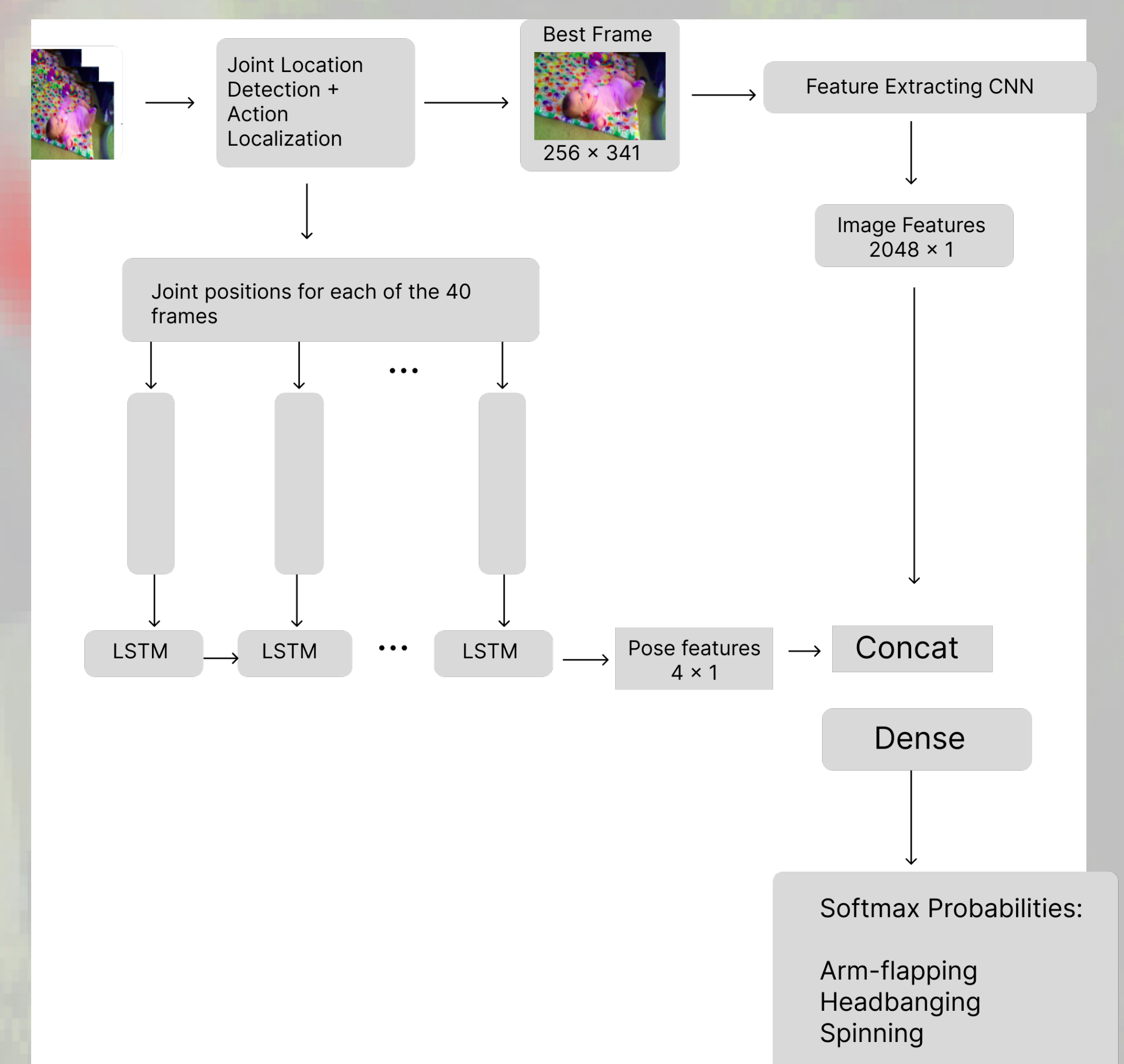
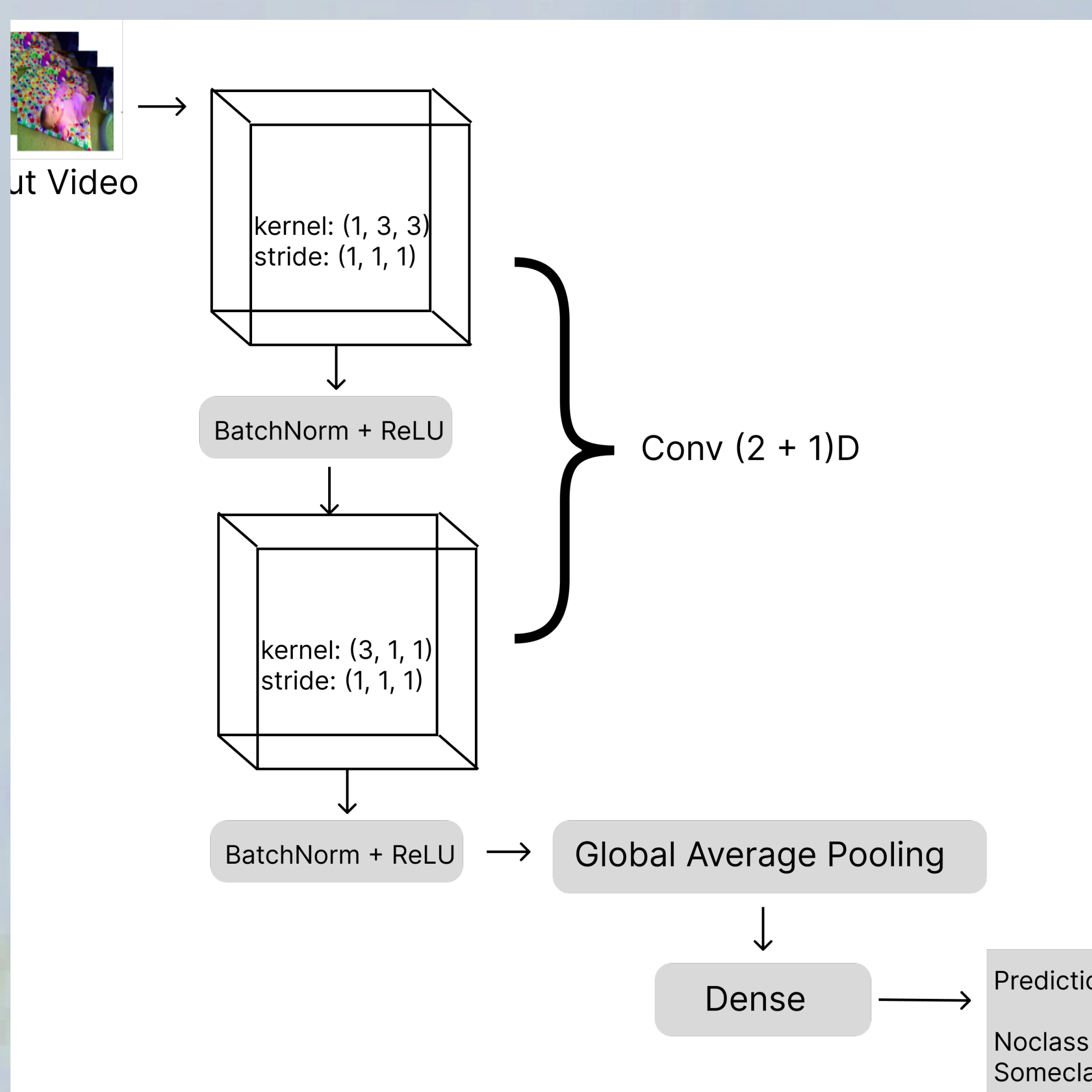
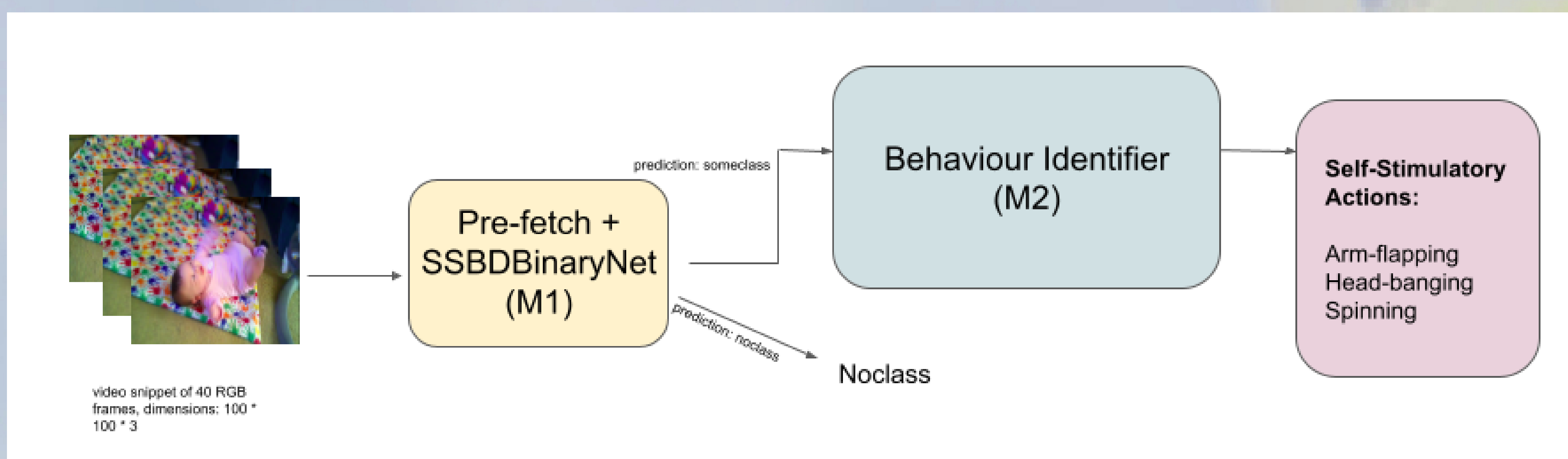


Introducing SSBD+ Dataset with a Convolutional Pipeline for detecting Self-Stimulatory Behaviours in Children using raw videos

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We propose a novel **pipelined deep learning architecture** to detect certain self-stimulatory behaviours that helps in the diagnosis of Autism spectrum disorder (ASD). We also supplement our tool with an augmented version of the Self Stimulatory Behavior Dataset (SSBD), and propose a new class *no-class*.



Results' highlights:

1. F1 scores of detecting and classifying actions : **0.819** and **0.789** respectively.
2. Strong ablations involving YOLOv7, Frame Localisation, and distillation.
3. New dataset contains **~45%** more data points.

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