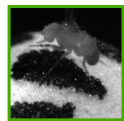
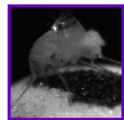


Single-view transformer (SVT): process views separately

Input images

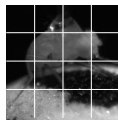
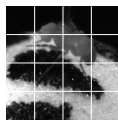


View 1



View 2

Patchify



Patch Embed



Fixed Pos Enc



+



Learnable View Enc



+



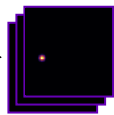
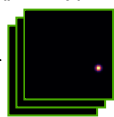
ViT

ViT

Heatmap Head

Heatmap Head

Predicted heatmaps (per keypoint)



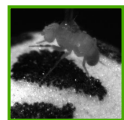
Heatmap loss

Heatmap loss

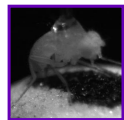
- Visible patch embedding
- Masked patch embedding
- Position encoding
- View encoding

Multi-view transformer (MVT): process views simultaneously

Input images

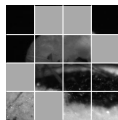
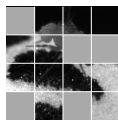


View 1



View 2

Patchify + Mask



Patch Embed



Fixed Pos Enc



+



Learnable View Enc



+



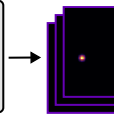
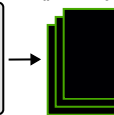
ViT

ViT

Heatmap Head

Heatmap Head

Predicted heatmaps (per keypoint)



Heatmap loss

Heatmap loss

Predicted 3D keypoints



3D keypoint loss

