

Tracking Movements of Avian Vocalization with Machine Learning

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1

Total Number of Images:

~2,300,000

Estimated time for tracking points:

3+ Years, 8 Hours Every Day



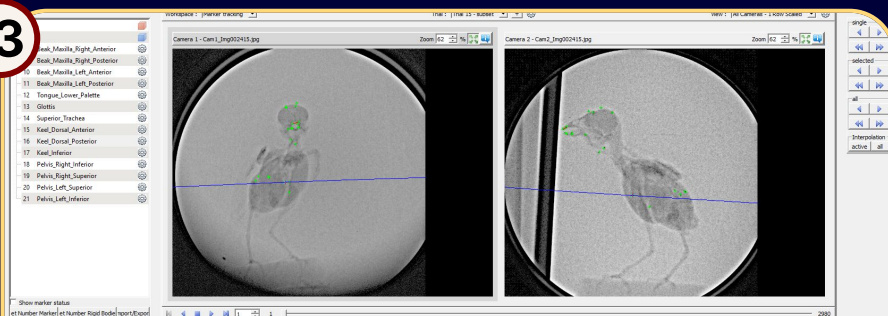
2

Solution DeepLabCut

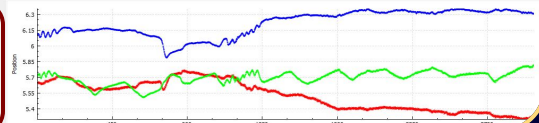
Provides 1 week of hand-tracking reduced to 7 min

How can we effectively train and interact with the algorithms?

3



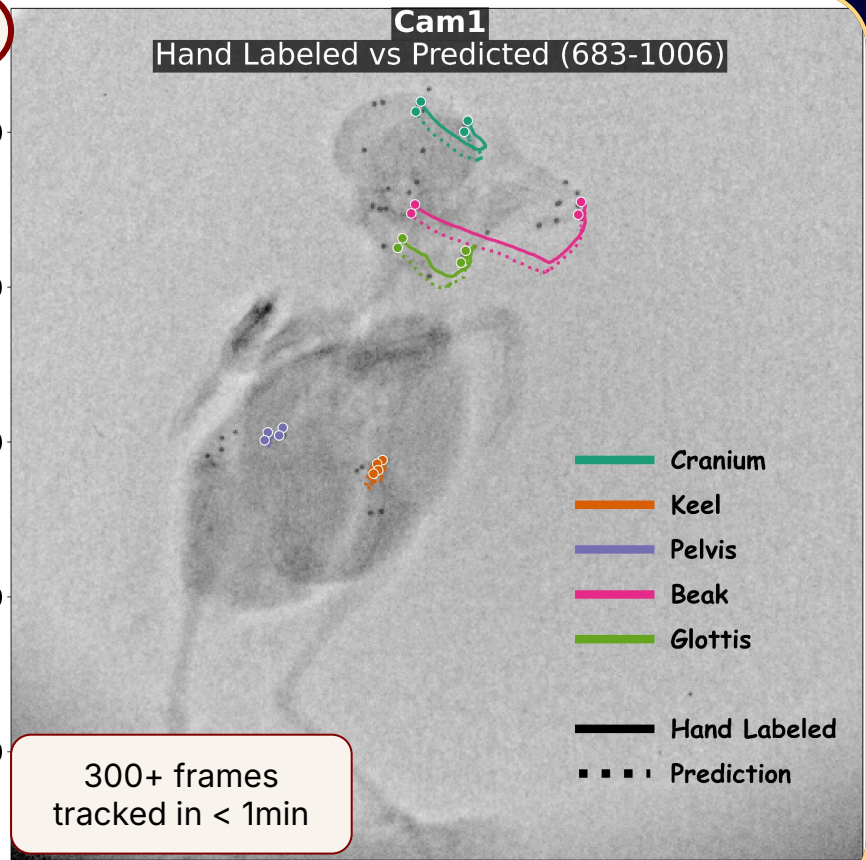
Hand-tracked data to train algorithm and compare



4

Cam1
Hand Labeled vs Predicted (683-1006)

200
300
400
500
600



- Cranium
- Keel
- Pelvis
- Beak
- Glottis
- Hand Labeled
- • • Prediction

300+ frames tracked in < 1min

200 300 400 500 600