



A. DATA COLLECTION



60x AudioMoth
acoustic loggers



700+ Great Tit
nesting sites



B. SONG ELEMENTS

bout



note
syllable
song



D. THE DATASET



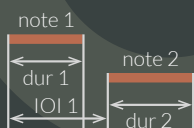
Annotated repertoire

Bird identity
and life-history

Feature vectors



Timing of song



Annotated songs

C. ANALYSIS PIPELINE



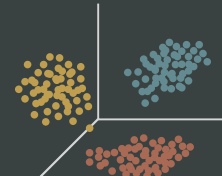
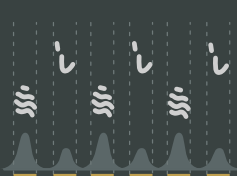
soundscape
recording



find dawn
song bouts



song
segmentation

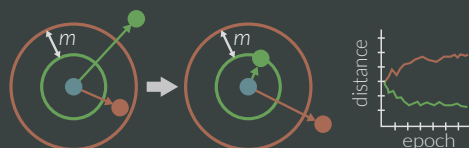


note
segmentation

projection
& clustering
independently
for each bird



annotated
repertoire



deep metric
learning
full population
ViT Model +
triplet loss