

Deep learning for the control of rabies: individual identification of dogs from camera trap data

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I. Socio-Ecological Approach of Dog-borne zoonotic diseases in Southeast Asia – SEA-dog-SEA

I. Socio-Ecological Approach of Dog-borne zoonotic diseases in Southeast Asia – SEA-dog-SEA

Zone A



Zone B



Zone C



I. Socio-Ecological Approach of Dog-borne zoonotic diseases in Southeast Asia – SEA-dog-SEA

Zone A



Dog 1

Zone B



Zone C



I. Socio-Ecological Approach of Dog-borne zoonotic diseases in Southeast Asia – SEA-dog-SEA

Zone A



Zone B



Dog 2

Zone C



I. Socio-Ecological Approach of Dog-borne zoonotic diseases in Southeast Asia – SEA-dog-SEA

Zone A



Zone B



Zone C



I. Socio-Ecological Approach of Dog-borne zoonotic diseases in Southeast Asia – SEA-dog-SEA

Zone A



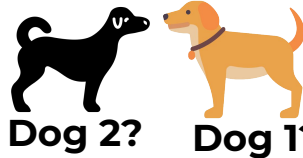
Dog 1

Zone B



Dog 2

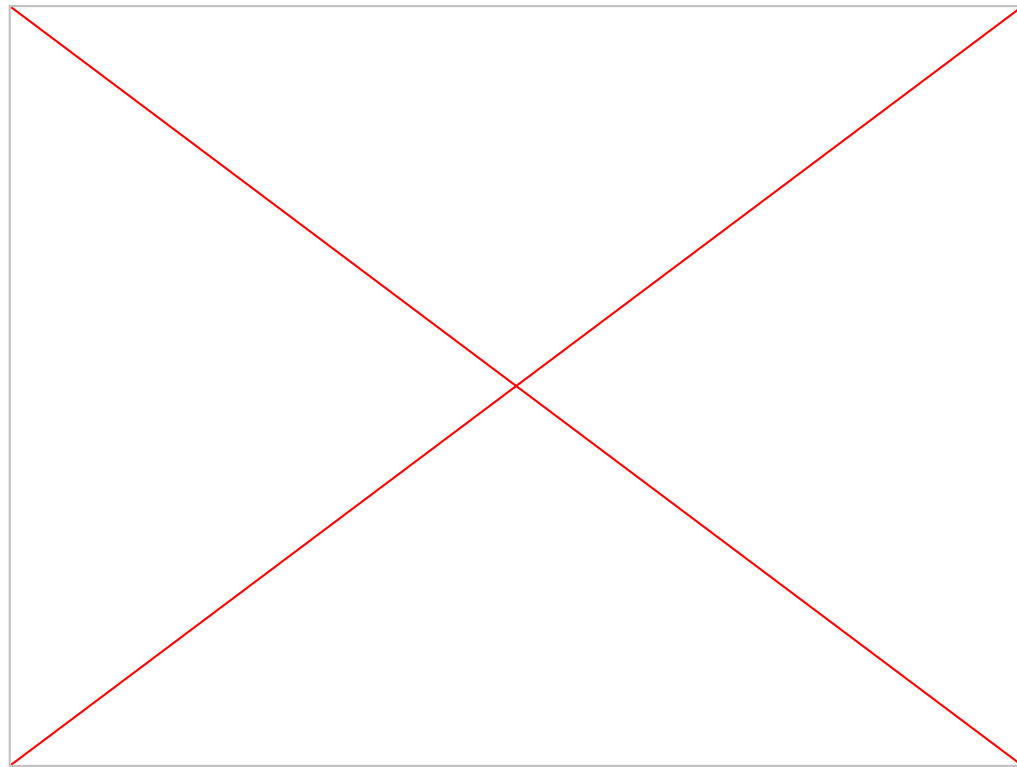
Zone C



Dog 2?

Dog 1?

II. Dog re-identification from videos in non-controlled environment



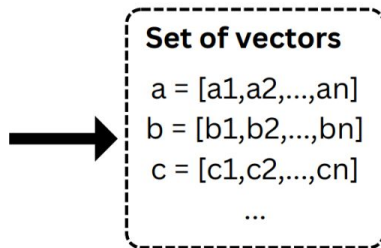
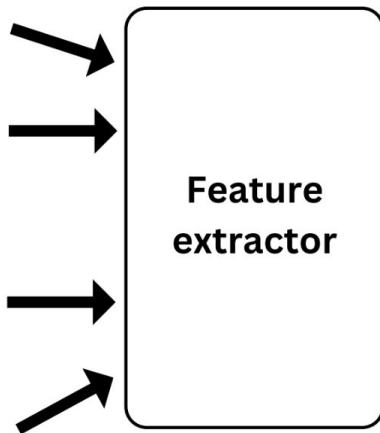
III. Dog re-identification visualization

III. Dog re-identification visualization

Thumbnails from videos
taken by trap camera



...



Clustering
algorithm

Result after
clustering



Dog 1



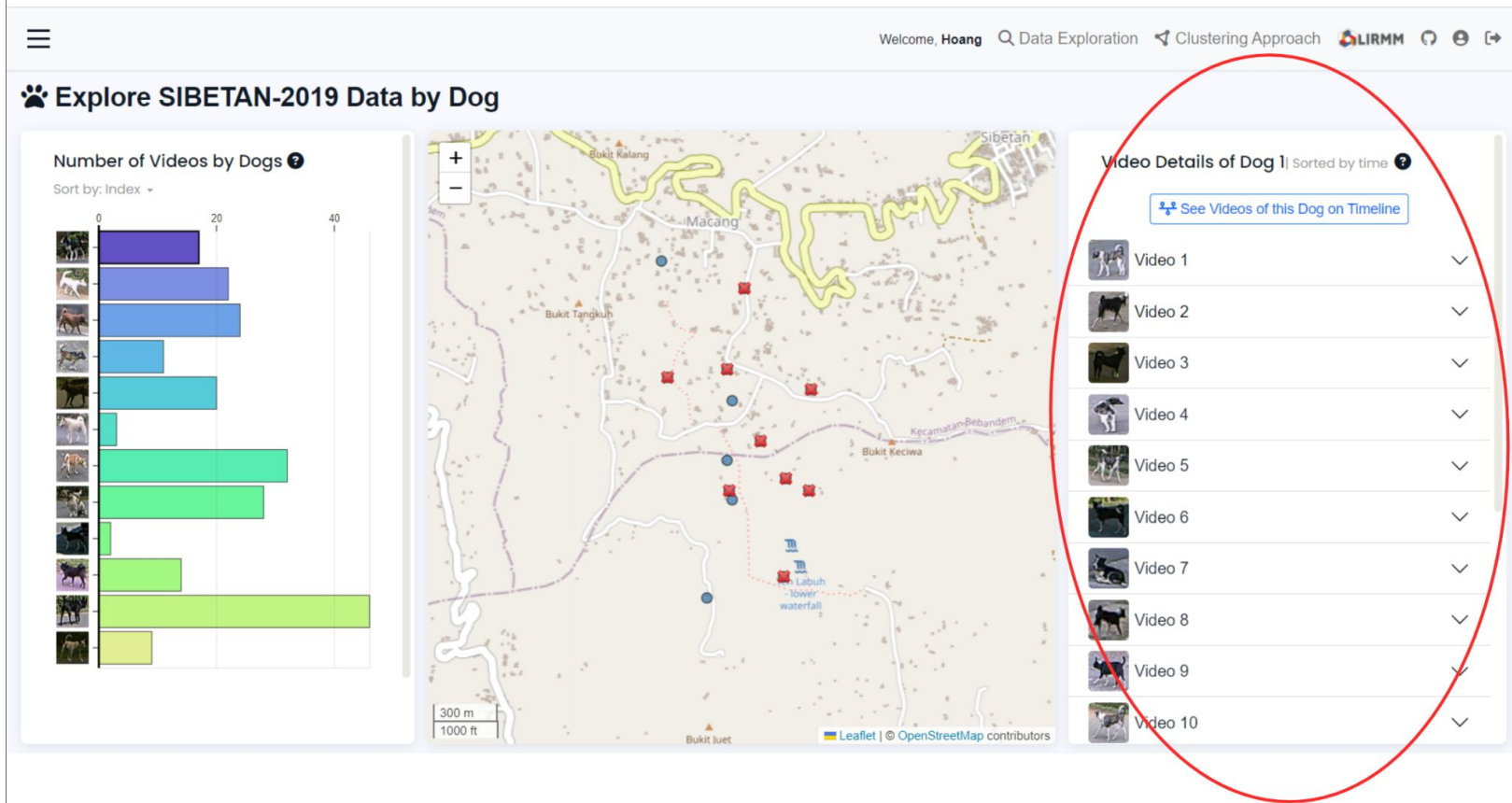
Dog 2



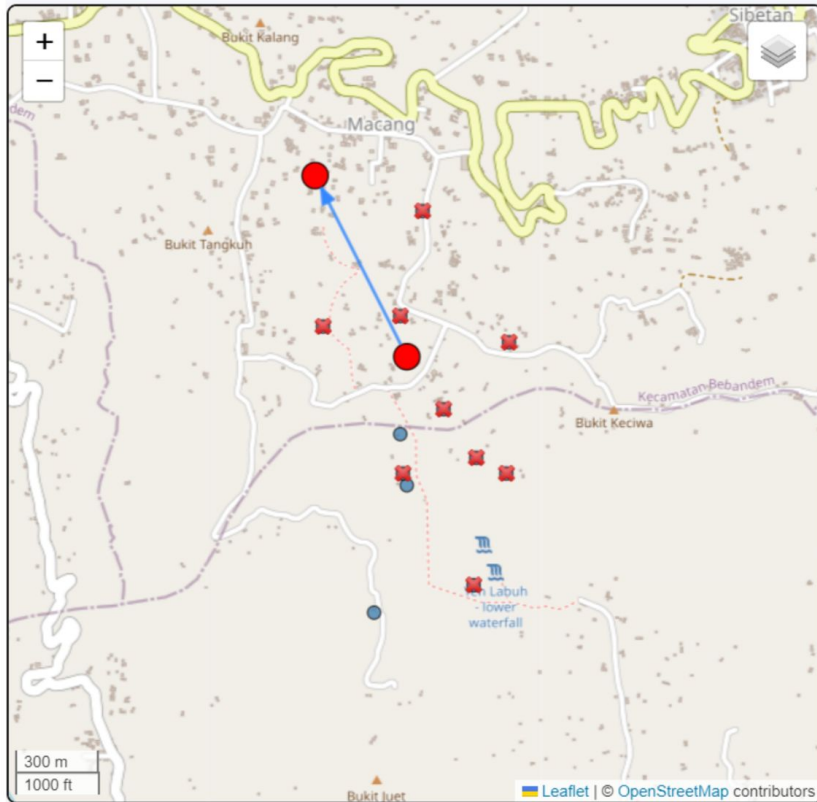
Database



III. Dog re-identification visualization



III. Dog re-identification visualization



Video 10



Video 11



Video 12



- Global ID: #36
- Camera: C05
- Start time: 09/20/2019, 10:08:48 AM GMT+8
- End time: 09/20/2019, 10:08:53 AM GMT+8

[See on Camera Timeline](#)

[+ Add Comment](#)



Video 13



- Global ID: #181
- Camera: C02
- Start time: 09/21/2019, 07:00:12 AM GMT+8
- End time: 09/21/2019, 07:00:17 AM GMT+8

[See on Camera Timeline](#)

[+ Add Comment](#)

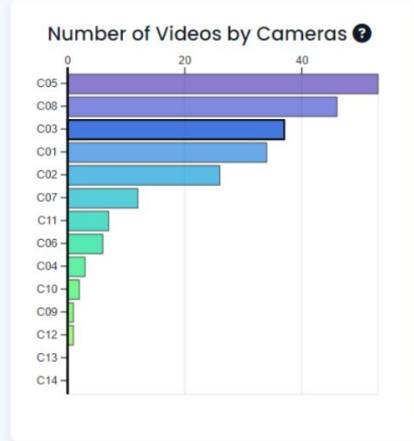
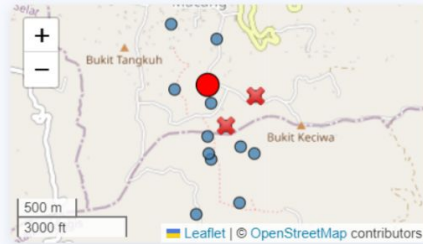


Video 14



III. Dog re-identification visualization

🐾 Explore SIBETAN-2019 Data by Camera





Timeline Camera C03 | Total videos: 37





☒ Dog #2 ☒ Dog #3 ☒ Dog #4 ☒ Dog #5 ☒ Dog #8 ☒ Dog #11






Dogs caught by Camera C03 | Sorted by time for videos of each dog


	Dog #2 1 Videos	▼
	Dog #3 7 Videos	▼
	Dog #4 2 Videos	▼
	Dog #5 9 Videos	▼
	Dog #8 2 Videos	▼
	Dog #11 16 Videos	▼

III. Dog re-identification visualization


Welcome, **Hoang**    

 **Dog Re-Identification**

 Upload dog images to predict the most similar dogs 



Remove file

 **Parameters**

Campaign:

SIBETAN-2019

Advanced>Show distance

Disable

Algorithm:


Agglomerative Clustering


Advanced|Number of trials






1


Number of outputs:


1


 Predict


 Some samples





 Prediction result:






 **Top 1: Dog 8**

 Presence: **28 times**

 On camera(s): **c03, c08, c05, c11**


 Last seen: **09:27:56 22/09/2019** on camera **c08**

 Appear most often at: **c05** (17 times)

 More details: [Click here](#) 

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08/23/2023

GREASE 

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Our website is available at <https://seadogsea.lirmm.fr>

Feel free to contact us for more information !