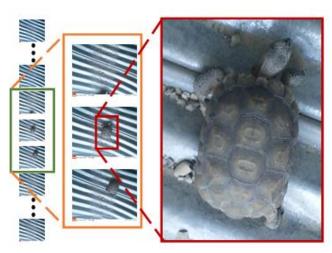
Brainlike, Inc. 1605 Sebring Hills Drive Henderson, Nevada 89052



email: <u>information@brainlike.com</u> website: <u>http://www.brainlike.com/</u>

Trail Camera "Triage" for Efficient Wildlife Protection: A Desert Tortoise Protection Use Case

Trail cameras offer advantages over alternative methods for keeping track of endangered wildlife. TrailCams come at a low price, they produce excellent imagery, and they run



for months between battery and memory card swaps. That's why TrailCams have been increasingly deployed in Clark County Nevada. Over 80 TrailCams now look over culverts that have been designed to provide safe passage for desert tortoises under Clark County desert highways. The imagery is affordable but it comes with a drawback: finding rarely occurring wildlife within thousands of images takes too long. About 30,000 images are downloaded for evaluation from each of the TrailCams,

twice a year. Biologists take about 30 hours to pore over images from each download. That adds up to over one person-year spent every season on these 80 cameras alone. Related tedium and cost preclude meeting broader coverage needs that otherwise would make good sense.

With encouragement from desert conservation biologists, Brainlike has been refining methods for "triaging" TrailCam film clips to the point where triaged sightings can be validated in less than an hour per download. Building on related ", PixMinTM solutions that Brainlike has delivered for finding endangered marine wildlife from aircraft and desert tortoises from drones, PixMin can now be configured to discard frames that do not contain desert tortoises while retaining all frames that may contain them, leaving only a small fraction of retained images for validation and recording.

In other settings, biologists may need to know right away when endangered species cross designated paths to initiate protective treatment. Doing so would require using <u>wireless</u> <u>trail cameras</u>, which have become increasingly affordable. Doing so would also require triaging images at remote camera sites to enable solar power, reduce transmission cost and increase TrailCam persistence. This is another straightforward PixMin application. For more information on how to meet these and other image triage needs, feel free to contact us.