

[Home](#) > [Technology](#) > [Science And Future](#) > This Is How AI Is Helping Save Endangered Wildlife Species...

SCIENCE AND FUTURE

2 years ago

# This Is How AI Is Helping Save Endangered Wildlife Species, By Turning Poachers Into Prey

**Gwyn D'Mello**

Updated on Feb 16, 2018, 16:13 IST

Poaching is a major problem for wildlife preserves. While these organisations are struggling to protect animals on the verge of extinction, poachers do whatever they can to sneak in and kill them for immediate gains, usually something as stupid as an animal's coat, horn or other body parts.



Now, researchers from the University of Southern California Center for Artificial Intelligence in Society are using AI to spot these illegal hunters in near-real time

and catch them before they can do harm.

The thing is, infrared cameras are great for picking up poachers when they strike in the night, but they can't distinguish between the heat signatures of animals and humans. What a team of USC reporters did is they employed a piece of proprietary technology to tag and label 180,000 heat maps of people and animals captured by the cameras. Using this data, they then trained a deep learning algorithm to recognise when it was a human the camera was seeing. They called it 'SPOT', the Systematic POacher deTector.



The researchers then put the technology to the test catching poachers at national parks in Zimbabwe and Malawi, with the AI processing live feeds from infrared cameras recording from drones flying above. Unfortunately, the AI took about 10 seconds to process images, far too long a period when a poacher might be sneaking up on an innocent rhinoceros, elephant, or tiger. But after much tweaking, the algorithm was able to spot poachers or animals in a much shorter time, about three-tenths of a second.

When put into service, SPOT could help ease the infrastructural burden on wildlife preserves using drones to prevent poaching. After all, instead of having people

poring over the feeds constantly, you can just have a computer detect intrusions in almost real-time.

Maybe then all the endangered species can finally have a chance at revival.



# Promoted Stories



AD PRESTIGE ESTATES...

Your dream home awaits at the future tech hub of B'lore

by Colombia



AD HEATPEAK

Angelina Jolie just confirms the rumor today.

by Colombia



AD KETTO

Cancer is haunting this 3-year-old's life. Help save him!

by Colombia



AD KETO

Drink 1 cup before bed, watch your body fat melt like crazy.

by Colombia



ADVERTISEMENT

**NOTHING NEW**  
Comfortable, Durable, & Made From Recycled Water Bottles  
[SHOP SUSTAINABLE](#)

## Latest Videos

[See All](#)



### The Math Of Being A Smoker

Up Next



INDIA TIMES  
SKETCHES



If you're a smoker, you can spend 1,500 hours of your teenage life just

O  
f  
B  
e  
i  
n  
g  
A  
S  
m  
o  
k  
e  
r



...  
I  
s  
T  
r  
u  
m  
p  
R  
i  
g  
h  
t  
I  
n  
B  
l  
a  
m  
i  
n  
g  
W  
H  
O  
F  
o  
r  
T  
h

e  
C  
o  
r  
o  
n  
a  
v  
i  
r  
u  
s  
p  
a  
n  
d  
e  
m  
i  
c  
?

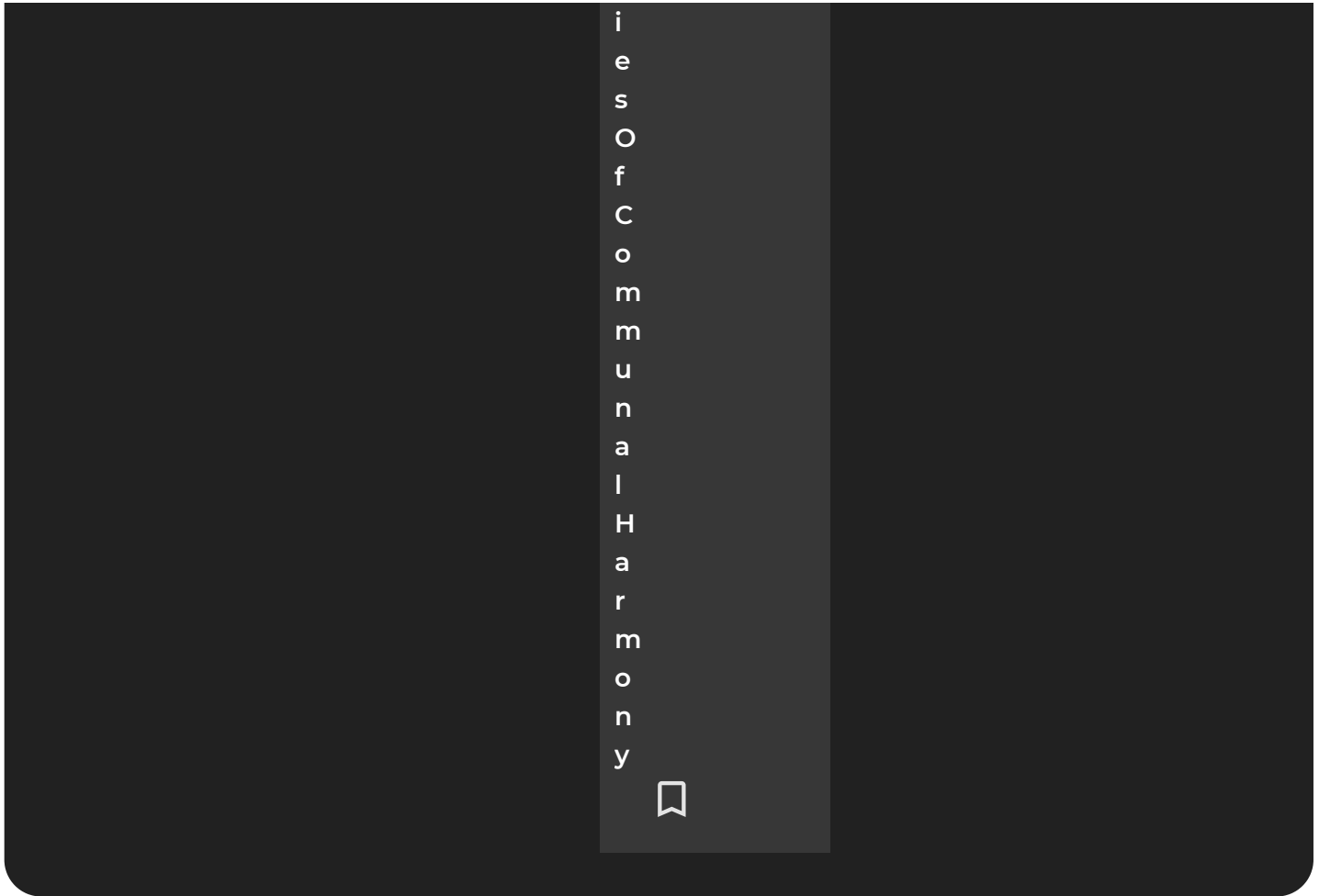


...  
P  
e  
o  
p  
l  
e  
W  
h  
o  
A  
r  
e  
H  
e  
l  
p  
i  
n  
g  
M  
i  
g

r  
a  
n  
t  
s  
R  
e  
a  
c  
h  
H  
o  
m  
e



...  
T  
h  
e  
G  
o  
o  
d  
N  
e  
w  
s  
S  
h  
o  
w  
,  
E  
p  
i  
s  
o  
d  
e  
4  
:  
S  
t  
o  
r



---

*UP NEXT*

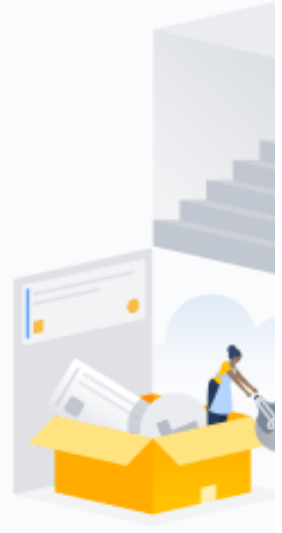




WEBINAR

## Optimize your Data Center instance

See how AppDynamics keeps work flowing



SCIENCE AND FUTURE

10 hours ago

# Chemicals Found In Kangra Tea May Lower COVID-19 Activity, Claim Scientists

2 min read ⓘ 417 Shares

**Monit Khanna**

Updated on May 31, 2020, 12:57 IST

### Highlights

- ★ According to him, the tea extract is a crucial element in the newly developed hand sanitizers and herbal soaps
- ★ Findings for this study has been published in the *Journal of Biomolecular Structures and Dynamics*

With the number of **COVID-19** cases continuing to rise in India, **researchers in India** and around the world are leaving no stones unturned to find a solution to take down the novel coronavirus once and for all.



Reuters

And now, CSIR’s Institute of Himalayan Bioresource Technology (**reported first by India Science Wire**) claims that chemicals found in Kangra tea could help in boosting immunity as they can block coronavirus activity better than anti-HIV drugs that are currently being used as a treatment method under ICMR guidelines.

Sanjay Kumar, director of the Palampur-based IHBT, said in a statement, “Using computer-based models, the scientists screened 65 bioactive chemicals or polyphenols that could bind to a specific viral protein more efficiently than commercially available anti-HIV drugs approved for treating COVID-19 patients.”

You may also like



SCIENCE AND FUTURE

Mission Accomplished: SpaceX Crew Dragon Successfully Meets Space Station 400 Km

3 min read

1 K Shares



SCIENCE AND FUTURE

Elon Musk, SpaceX And NASA Make History: Successfully Launch Humans To Space & We

3 min read

14 K Shares



SCIENCE AND FUTURE

How Tourism Industry Will Change After COVID-19 Lockdown With Help Of Tech

4 min read



SCIENCE AND FUTURE

Controlling Locust Swarms: How Nations Around The World Fight Locust Attacks

4 min read

147 Shares



SCIENCE AND FUTURE

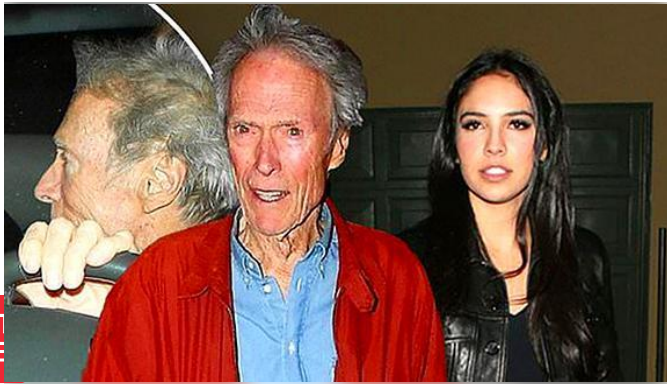
Six Feet Social Distancing Not Safe, As Coronavirus May Travel Up To 20 Feet



Ad

Cli  
Ea  
j...

VISI  
SITE



ADVERTISEMENT

Recommended by  COLOMBIA



Unsplash

He added, “These chemicals might block the activity of the viral protein that helps the virus to thrive inside human cells.”

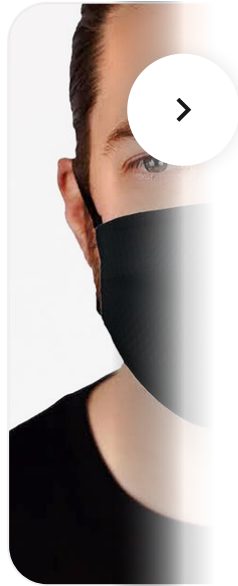
**Shop Essentials** — [See More](#) 



**Anti-Pollution Dust Mask (N95)**

By Pollution Safe

₹ 249



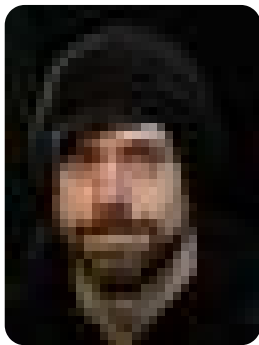
**30 Days Reusable Protection Mask**

By Intakt

₹ 450 ~~₹ 999~~

Kumar [in a conversation with TOI](#) has also stated that for now, IHBT has just screened the chemicals with the help of computer-based models. They intend to go for live evidence at CSIR facilities to follow the lead and carry out further necessary validation for the study.

**Read Next**



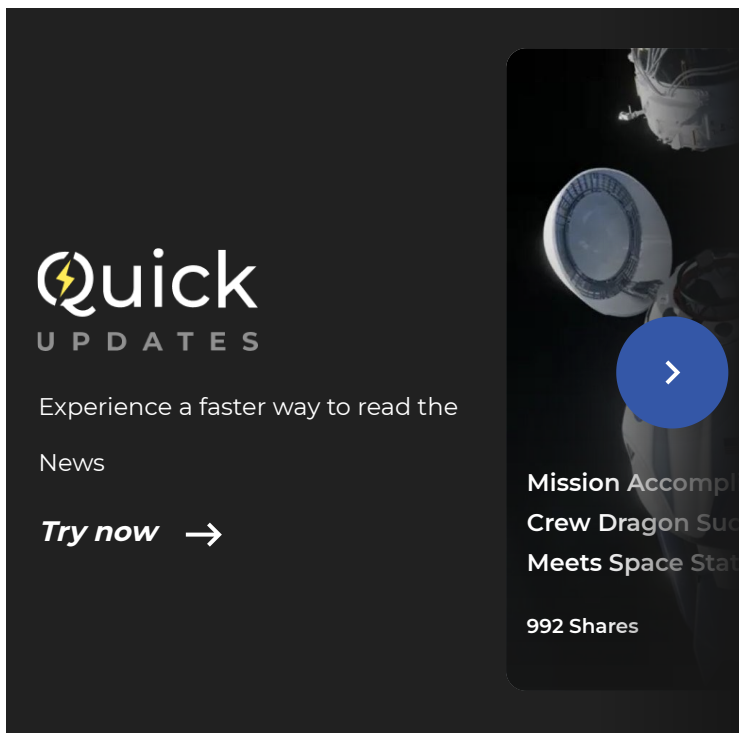
NEWS

**Twitter CEO Jack Dorsey Is A True Leader For**

## Standing Up To Trump's Online Bullying

6 min read 492 Shares

According to him, the tea extract is a crucial element in the newly developed hand sanitizers and herbal soaps that are in demand to fight against the novel coronavirus.



**Quick**  
UPDATES

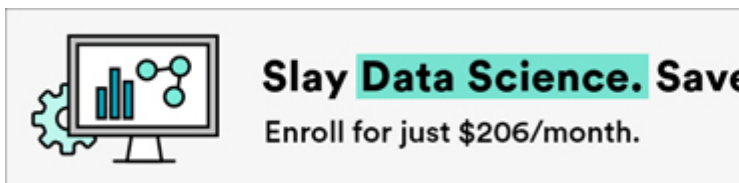
Experience a faster way to read the News


**Try now** →

Mission Accomplished  
Crew Dragon Successfully Meets Space Station

992 Shares

ADVERTISEMENT





**Slay Data Science. Save**  
Enroll for just \$206/month.



Unsplash

Findings for this study has been published in the Journal of Biomolecular Structures and Dynamics with the title ‘Identification Of Bioactive Molecules From Tea Plant As SARS-CoV2 Main Protease Inhibitors.’ Other researchers part of this study includes Vijay Kumar Bhardwaj, Rahul Singh, Jatin Sharma, Vidya Rajendran and Rituraj Purohit.

While there is still a ton of research underway to see its efficacy against the novel coronavirus, it is great to see natural options available at a time when everything else seems to be going out of hand.



### THE CONVERSATION (0)

Start a conversation, not a fire. Post with kindness.

**Post Comment**





"These Might Be the Most Sustainable Sneakers on the Market" - Esquire

Nothing New

You may also like

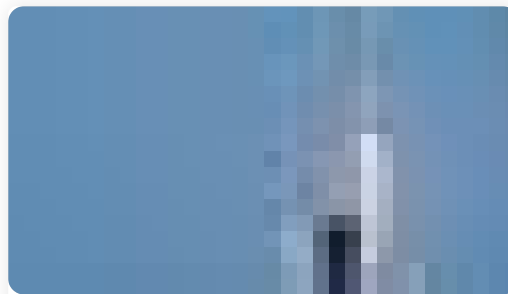


SCIENCE AND FUTURE

Mission Accomplished: SpaceX Crew Dragon Successfully Meets Space Station 400 Km Above Earth

3 min read

1 K Shares

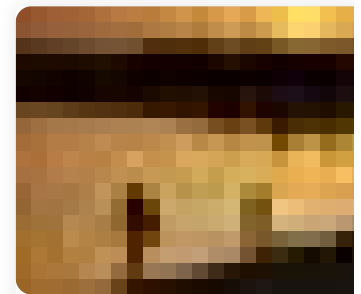


SCIENCE AND FUTURE

Elon Musk, SpaceX And NASA Make History: Successfully Launch Humans To Space & We Are Proud

3 min read

14 K Shares



SCIENCE AND FUTURE

How Tourism Industry Will Help After COVID-19 Lockdown

4 min read



Get the NEWS that fits your groove.

MENSXP | IN | what's hot

Times of India · Economic

Times · Navbharat

Times · Maharashtra

Times · Gaana · Cricbuzz · Rometry

QUICK LINKS

Videos · News · Technology · Mobility

· Lifestyle · Entertainment · Trending · Health ·

SPECIALS

#InThisTogether · 2020 DISRUPTORS · The Big

Image · Sustainability · Coronavirus ·

About Us · Contact Us · Terms & Conditions ·

Privacy Policy · Sitemap

Subscribe to

Indiatimes and get handpicked updates based on your interests!

Enter email ID



Connect With Us On





Now · Goal · Games

App · Longwalks App · MX Player ·

COPYRIGHT © 2020 TIMES INTERNET LIMITED. POWERED BY INDIATIMES LIFESTYLE NETWORK. ALL RIGHTS RESERVED