

Gaming COVID-19: Is Digital 'As Good'?

Using a pandemic as an opportunity

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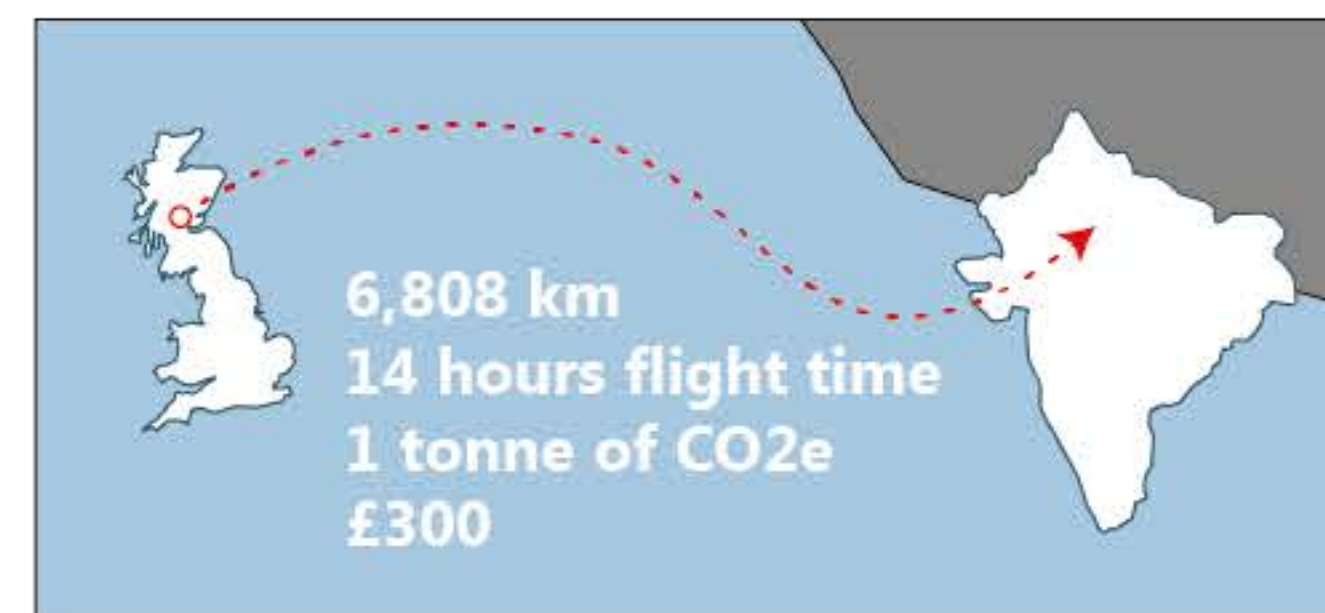
This poster looks at a range of steps taken to pivot a practical field course, usually delivered in the Sariska Tiger Reserve in Rajasthan, India to a fully online digital course. The course is open to qualified vets participating in the MVetSci Conservation Medicine programme, to CPD students and to government sponsored vets working in India.

During the residential course students carry out a variety of practical and theoretical work, where they are given as many chances as possible for a hands-on learning experience. Tuition is carried out in the field to develop practical skills in:

Population ecology (camera trapping, transect surveys),

Wildlife disease investigation (outbreak investigation, pathological investigation, wildlife-livestock-human interface)

and best practice Capture and restraint techniques (including hands-on anaesthesia of free-ranging wildlife).



Missed opportunities: Social, travel and cultural experiences, wildlife, nature, environment, food, networking opportunities...

Prohibitive factors for attending: Financial outlay, family commitments, work commitments, carbon footprint, travel concerns, health, accessibility, comfort, cultural overload, anxiety, allergies, logistics, connectivity...

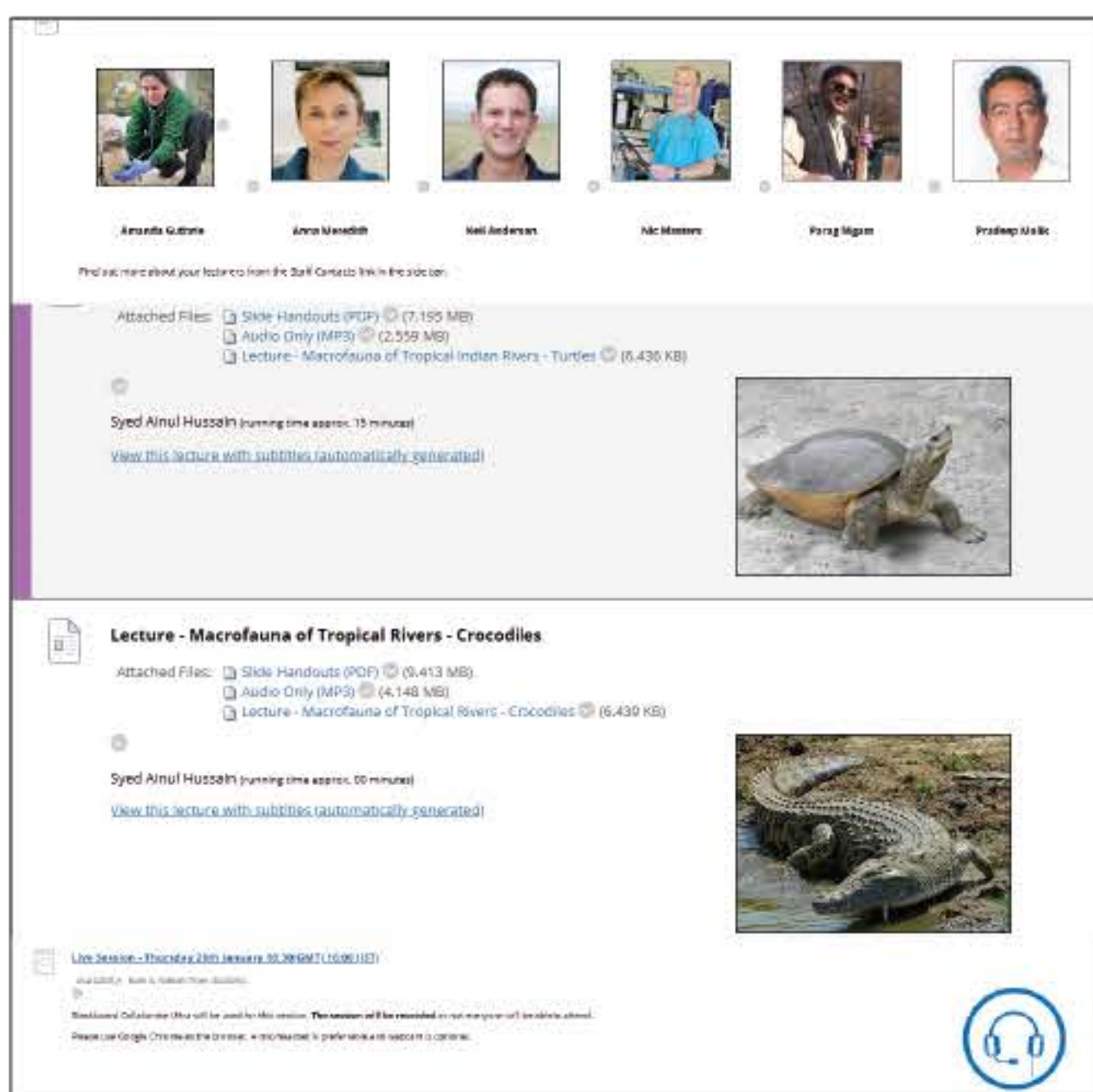
Health warning:

"Practice physical distancing by avoiding unnecessary travel and staying away from large groups of people."*



*World Health Organisation

Many factors that draw students to digital education are the same which make this residential course difficult for them to attend. The pandemic negatively affected those who wanted to attend but gave us the opportunity to create a more accessible course available to a wider audience.

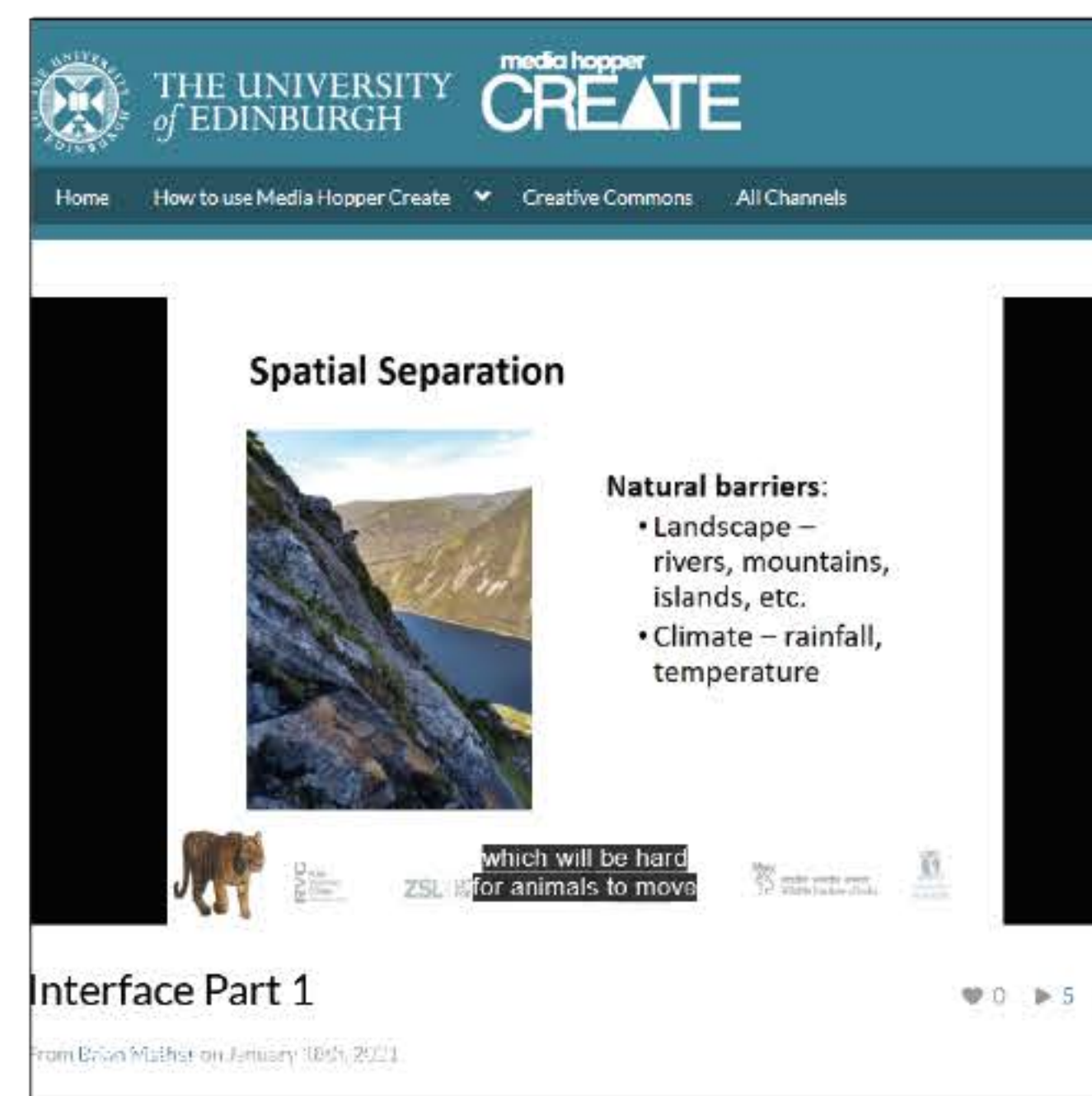


The organisation of the Virtual Learning Environment allows for a tightly structured course, organised and sign posted for easy navigation, consistency and flow*.

With preparation a level of familiarisation and connectedness can be established between the student and the contributing staff. Supporting materials can be provided to establish a more widely accessible course.

Here you can see clearly defined lectures with a selection of options for the students including an interactive lecture, an audio only version and lecture slides.

*Power, J., & Kannara, V. (2016). "Best-practice model for technology enhanced learning in the creative arts." Research in Learning Technology, 240

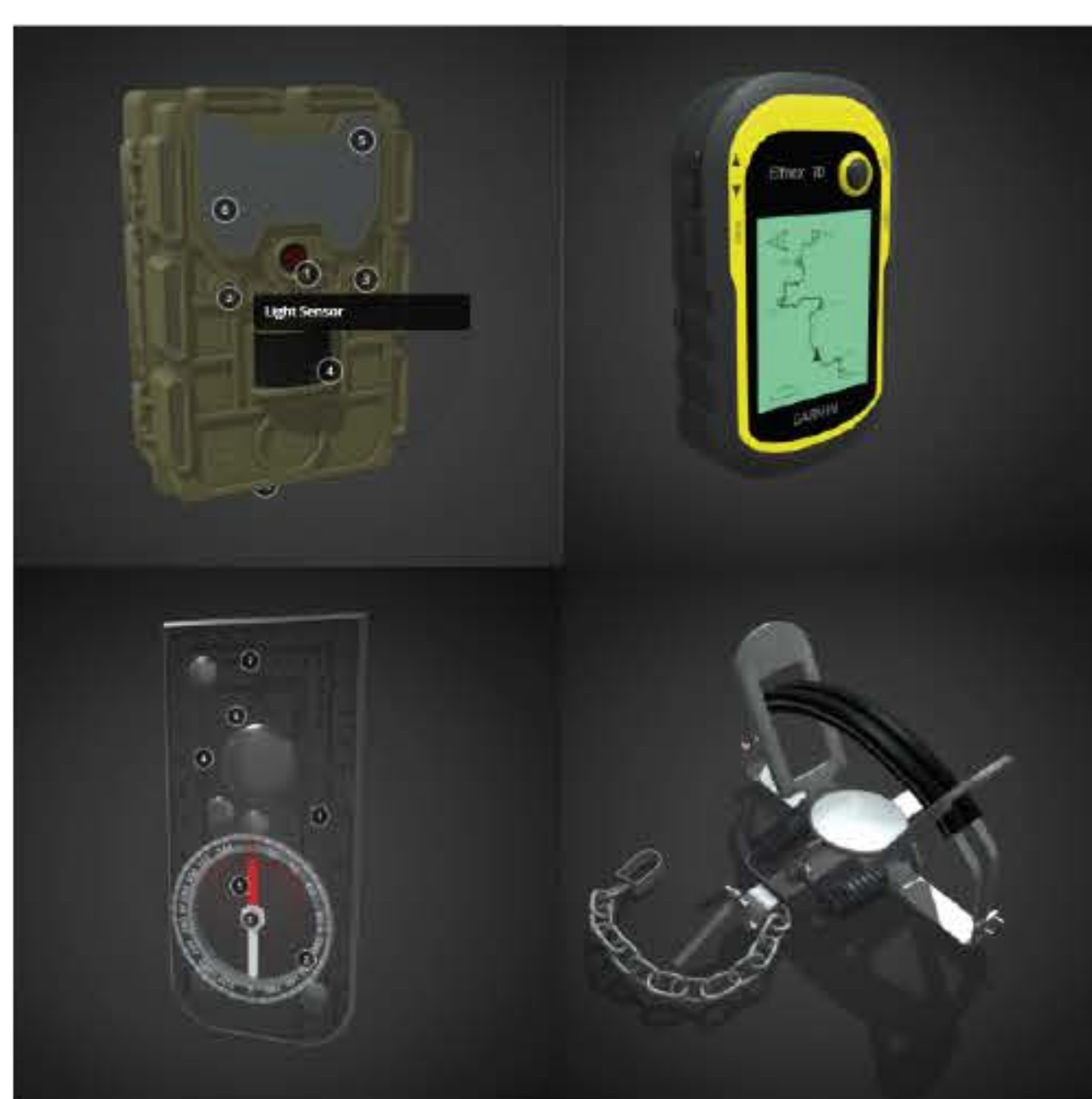


Generating video lectures and content hosted on Media Hopper Create gave us the ability to add automated captions to our lectures.

Subtitles are a crucial inclusion in meeting our accessibility requirements for video content but the added benefits to students for whom English is a second language is incredibly valuable*.

Combined with the facility for all students to watch and rewatch content at a time of their convenience and as a tool that automatically adjusts to accommodate internet bandwidth this proved to be a valuable inclusion.

*Gernsbacher MA. Video Captions Benefit Everyone. Policy Insights Behav Brain Sci. 2015 Oct2(1):195-202

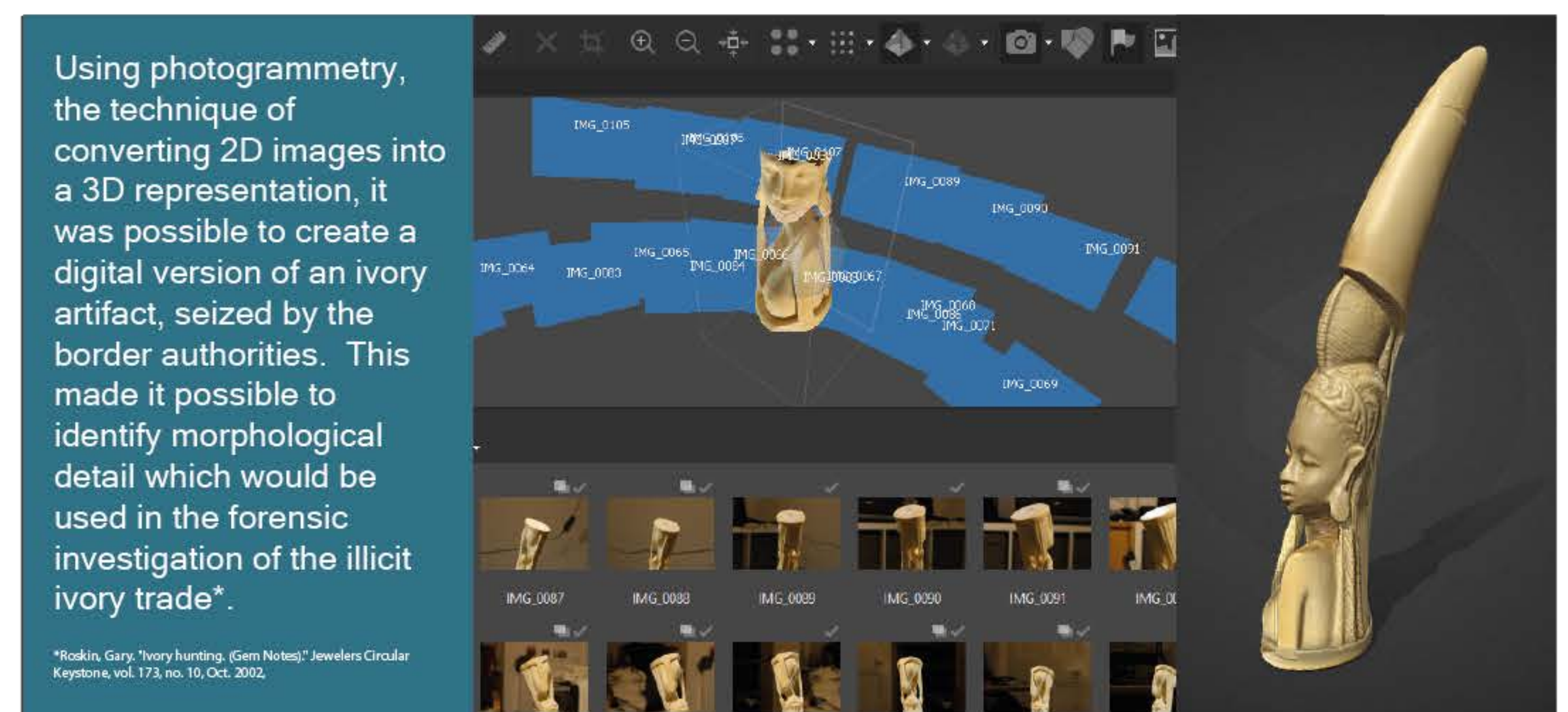


"Hands off" practicals

Developing digital models to supplement the lecture content allowed the students to investigate and manipulate* the tools that they would have otherwise had only brief exposure to in the live sessions. This included completely new technologies but also equipment familiar to them, from their time in practice, used in unfamiliar situations. With detailed annotations, animations, and audio accompaniment a rich series of resources** have been created and will be used for an audience beyond our Master's students.

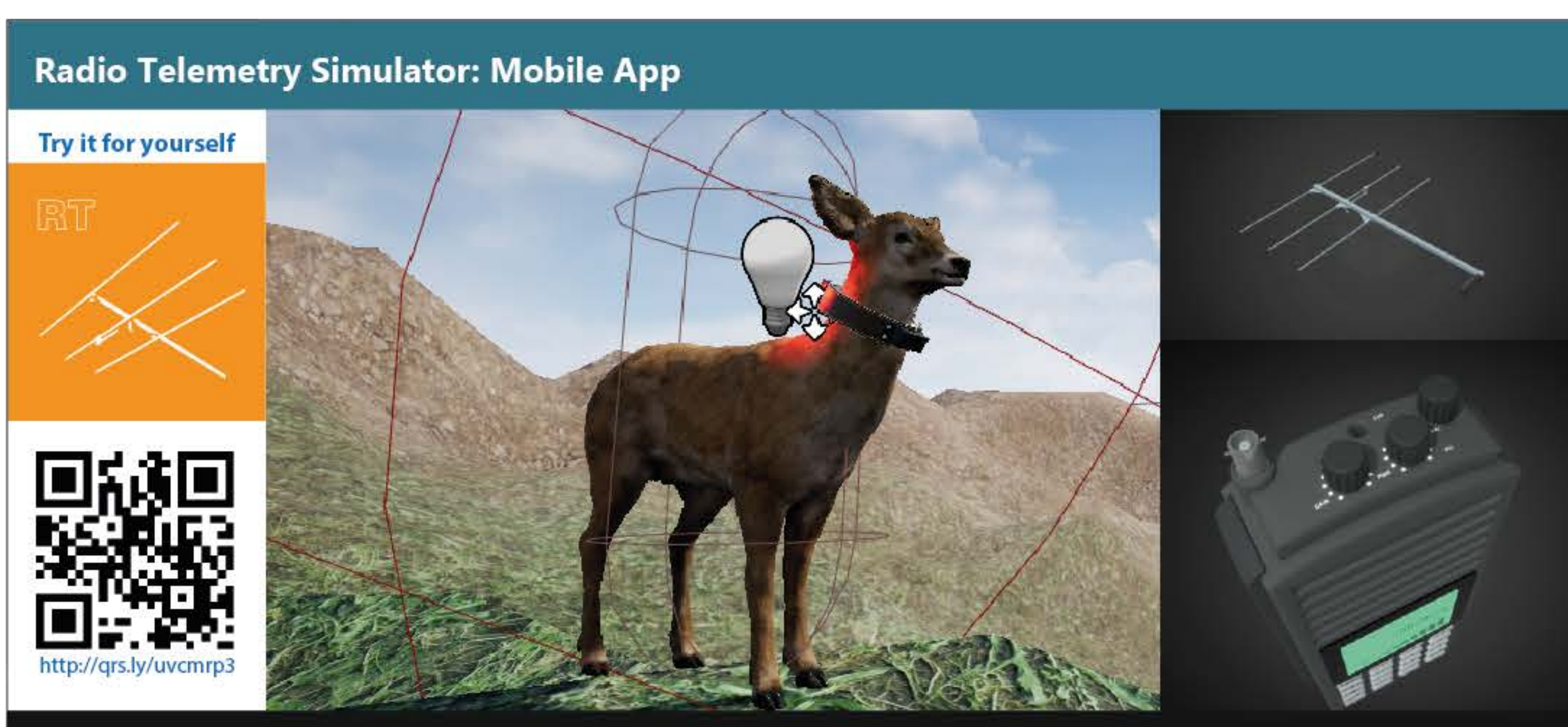
*Bibby, D.W. 2018. Product training for the technical expert: the art of developing and delivering hands-on learning First, Hoboken, New Jersey: Wiley: IEEE Press.

**Chang et al., 2018. Authentic Learning Through Advances in Technologies 1st ed. 2018., Singapore: Springer Singapore | Imprint: Springer.

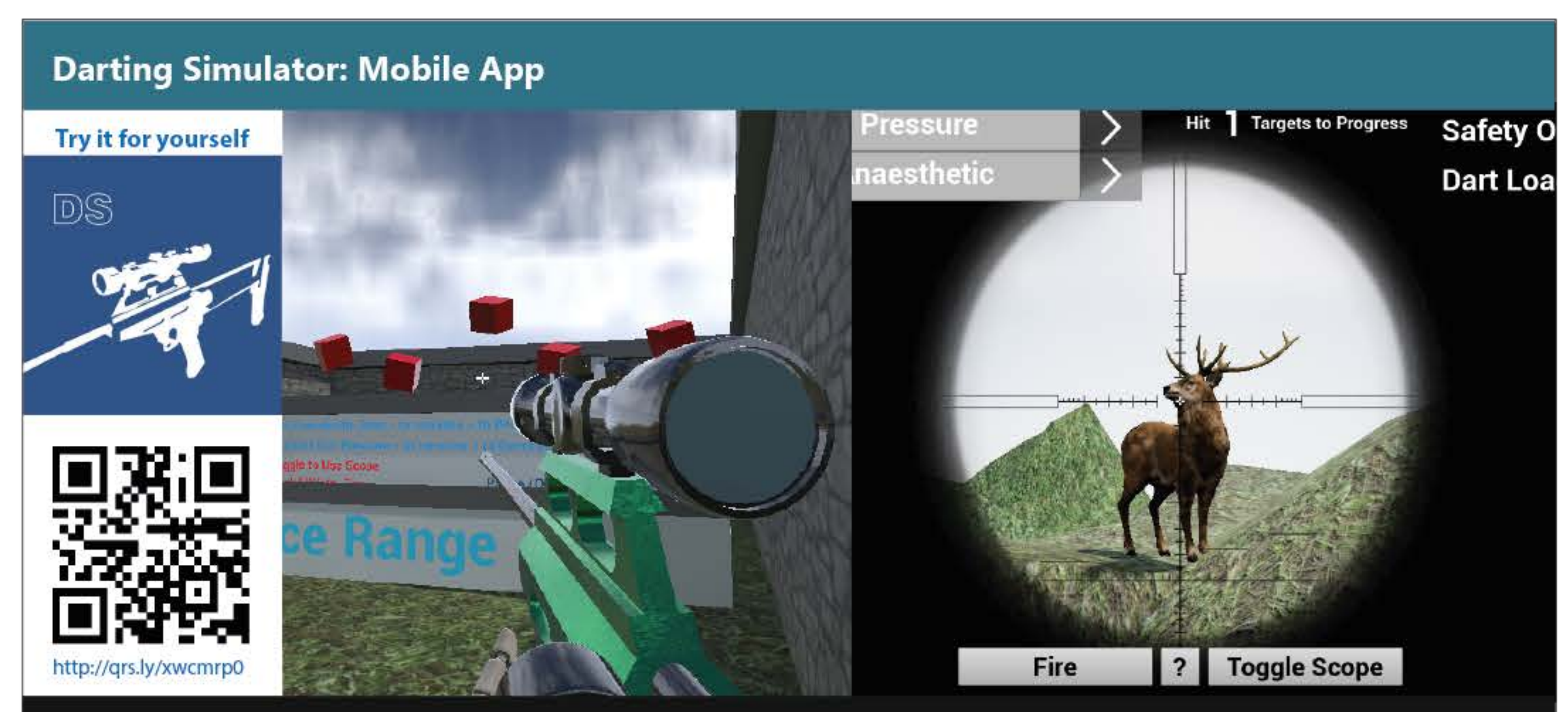


Using photogrammetry, the technique of converting 2D images into a 3D representation, it was possible to create a digital version of an ivory artifact, seized by the border authorities. This made it possible to identify morphological detail which would be used in the forensic investigation of the illicit ivory trade*.

*Rogals, Gary. "Ivory hunting." Gem Notes, Jewelers Circular Keystone, vol. 173, no. 10, Oct. 2002.



We developed an interactive simulation to complement and enhance the training in population monitoring with a focus on understanding how to using radio telemetry to study animal home range/movement and to decipher the strength of a radio collar signal through nuances in signal output.



The second simulation provides a controlled environment to teach safe immobilisation technique of free-living wild animals through chemical means, which is an essential tool for wildlife health professionals. This is a risk-free scenario to evaluate the darting procedure and to visualise the implications of an anaesthetic procedure in the field, supplementing the theory on safe, ethical, humane and professional methods.

...it all depends on your metric.