

# ARTIFICIAL INTELLIGENCE FOR VETERINARY MEDICINE

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Digital Innovation

## Cattle facial recognition could combat agricultural fraud

27th January 2020



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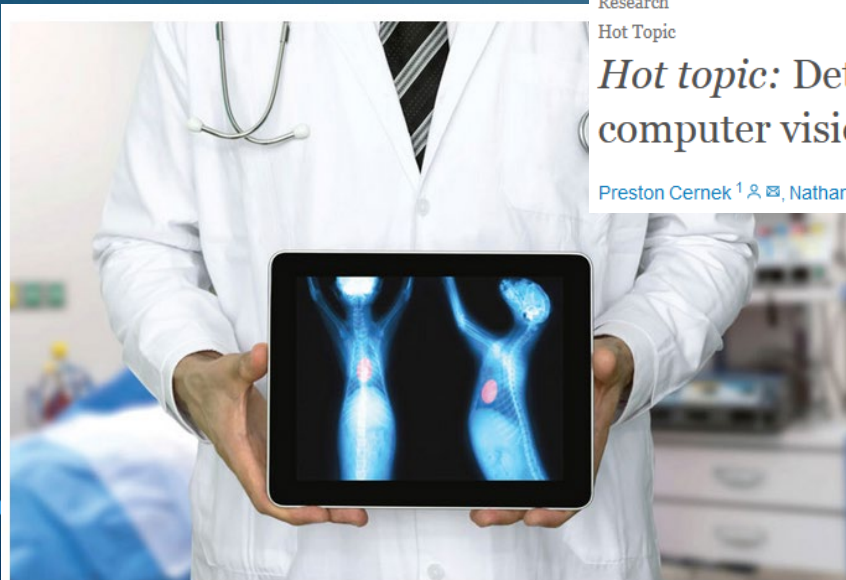
# AI in veterinary medicine: From finding disease to predicting it

In addition to predicting disease, this next generation of diagnostic tools helps support the value of preventive care

June 2, 2020



<https://www.veterinarypracticenews.com/ai-diagnostics-january-2020/>



X-ray vision

<https://www.avma.org/javma-news/2020-07-15/artificial-intelligence-veterinary-medicine>



Journal of Dairy Science  
Volume 103, Issue 10, October 2020, Pages 9110-9115



Research  
Hot Topic  
**Hot topic: Detecting digital dermatitis with computer vision**  
Preston Cernek<sup>1</sup>, Nathan Bollig<sup>2,3</sup>, Kelly Anklam<sup>1</sup>, Dörte Döpfer<sup>1</sup>

<https://doi.org/10.3168/jds.2019-17478>

## VetTag: improving automated veterinary diagnosis coding via large-scale language modeling

Yuhui Zhang, Allen Nie, Ashley Zehnder, Rodney L. Page & James Zou


*npj Digital Medicine* 2, Article number: 35 (2019) | Cite this article

<https://rdcu.be/b6fhU>




## Veterinarians Use Artificial Intelligence to Aid in the Diagnosis of Addison's Disease

<https://doi.org/10.1016/j.domaniend.2019.106396>



Computers and Electronics in Agriculture  
Volume 169, February 2020, 105163

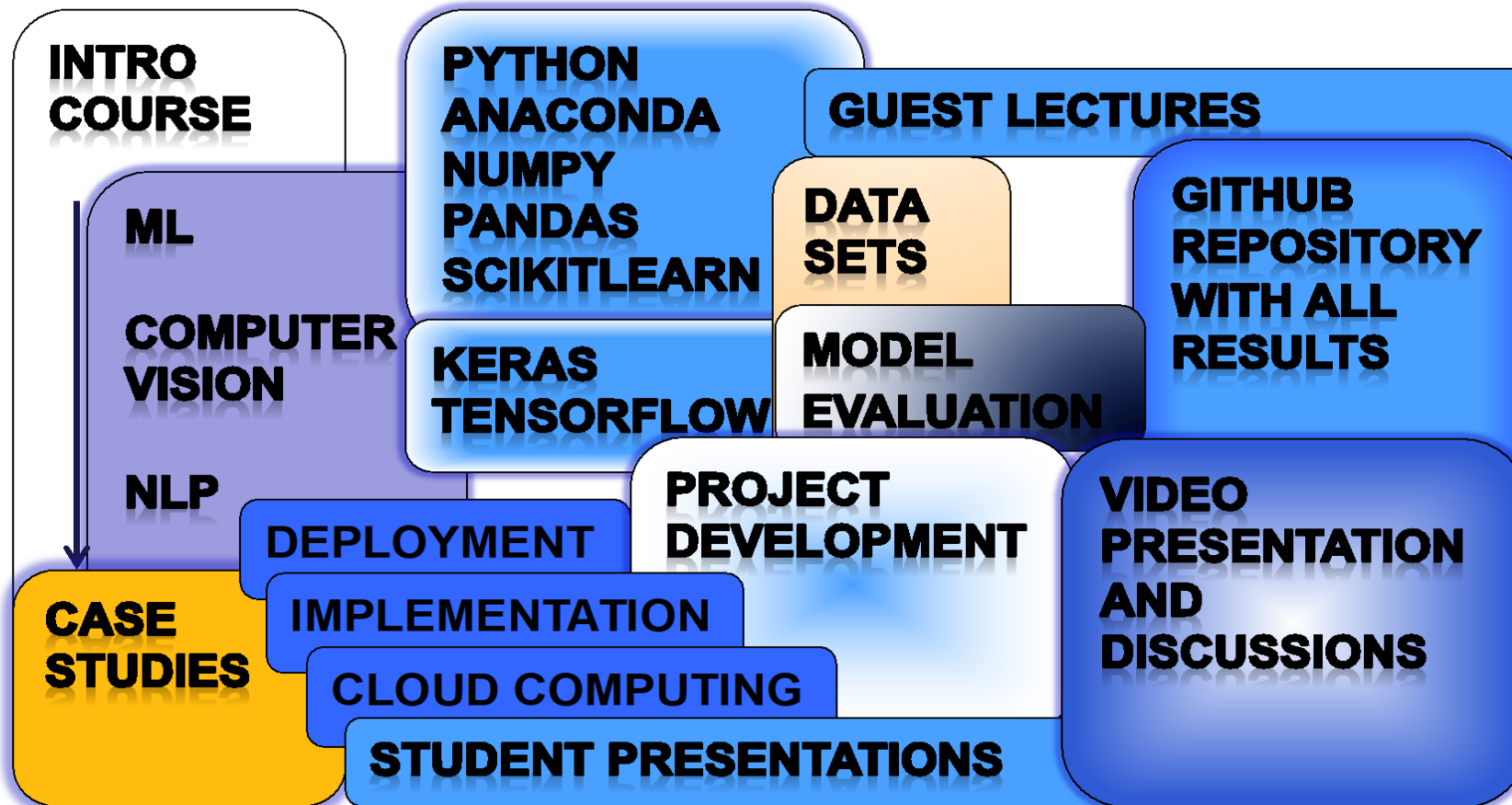


## PADI-web: A multilingual event-based surveillance system for monitoring animal infectious diseases

Sarah Valentin<sup>a, b, c</sup>, Elena Arsevska<sup>a, c</sup>, Sylvain Falala<sup>a</sup>, Jocelyn de Goër<sup>d</sup>, Renaud Lancelot<sup>a, c</sup>, Alizé Mercier<sup>a, c</sup>, Julien Rabatel<sup>c</sup>, Mathieu Roche<sup>b, c</sup>

<https://doi.org/10.1016/j.compag.2019.105163>

# TIME LINE



**WEEK: 1 | 2**

# YOU WILL DO ALL OF THIS!

- Write code in Python programming language.
- Explain machine learning concepts.
- Describe how machine learning is relevant to veterinary practice today.
- Build a machine learning application to automate a classification or regression task using data relevant to veterinary medicine.
- Automate your model: apply existing machine learning and model deployment frameworks within an application.
- Recognize that the pathway to a working machine learning application often includes iterative problem-solving.
- Develop scientific communication skills.
- Evaluate the strengths and limitations of a machine learning application