Learning Discriminative Representations to Interpret Image Recognition Models

Thèse de Doctorat

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Motivation: Low stakes

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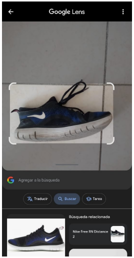

still, I know my phone can *identify* my current shoes

and obtain a new pair of the shoes I like

The *Nike Free RN Distance 2*

Motivation: Raising the stakes

Now let’s consider riskier situations:

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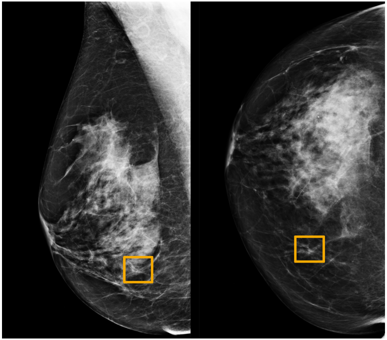

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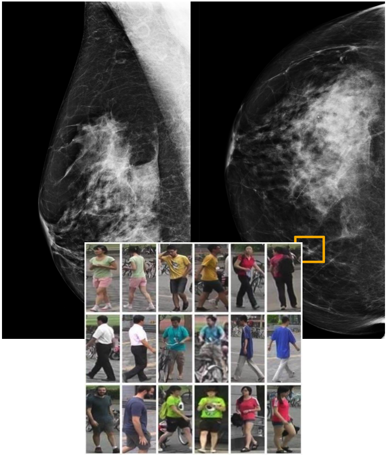

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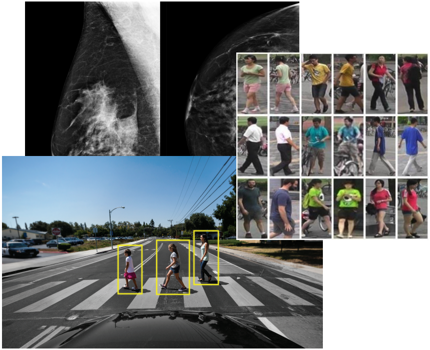
Motivation: Straight to the point



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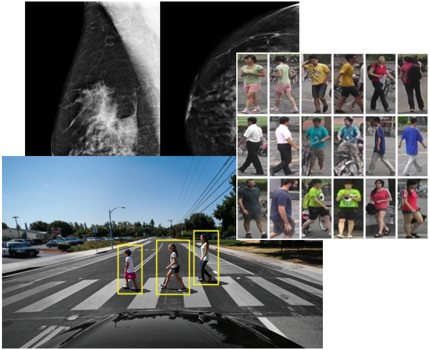

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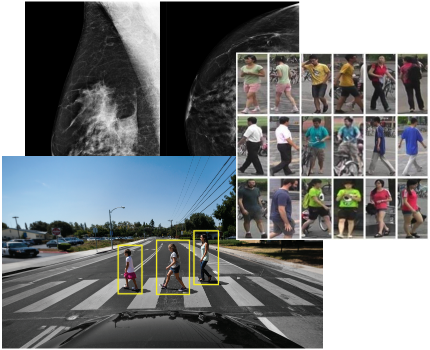

- How do we know **how** safe a system is?
- How do we **know** how a system works?
- If a system fails, **who** is accountable?

Let’s slow for a bit
and go step by step:

Computation, Computer Vision and AI

[1]

Objectives

[1]

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References

This is a text in second frame. For the sake of showing an example.

- Text visible on slide 1

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References I

Z. C. Lipton, “The mythos of model interpretability: In machine learning, the concept of interpretability is both important and slippery.” *Queue*, vol. 16, no. 3, pp. 31–57, 2018.