Intelligence
Through the Lens of Interaction:
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The common approach in computer vision is learning passively from unchanged sets of labeled data. This method has had an undeniable impact on moving the field forward. However, deploying these models in embodied agents and turning their passive knowledge into action is not straightforward. In this talk, I consider an alternative learning approach, learning from interaction. First, I explain what we can learn by observing two intelligent agents, humans and dogs, interact with the environment. I investigate the additional cues that we can use from these agents, such as movements and attention, to allow for a better visual understanding, especially when there are no semantic labels involved. I will then expand on how to design models that can learn from the feedback they receive from interacting with the environment and how they can use this feedback to update their actions. Finally, I will propose a different learning scheme that is closer to how humans learn by blurring the line between training and evaluation.

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