

Large-scale 3D Synthetic Scene Generation for Active Vision Modeling

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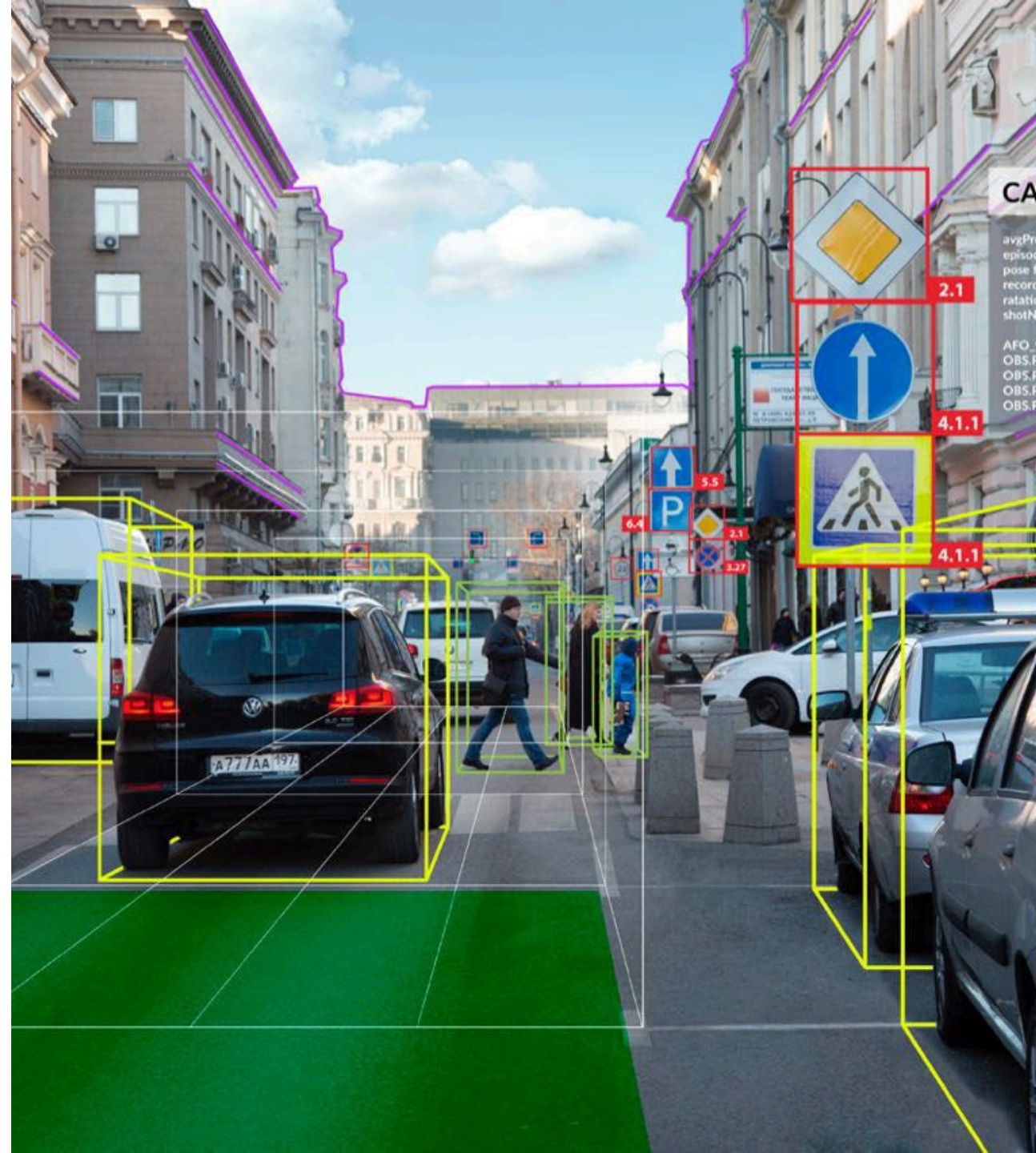
Supervised by Dr. Hadi Vafaii

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Why teach a computer how to see?

Normative modeling doctrine in Neuroscience.

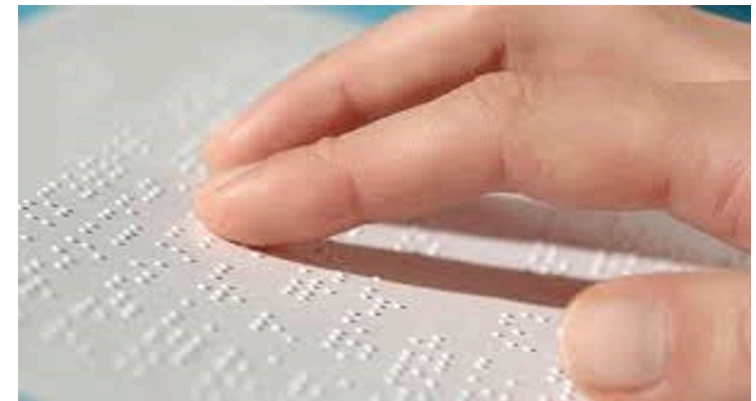
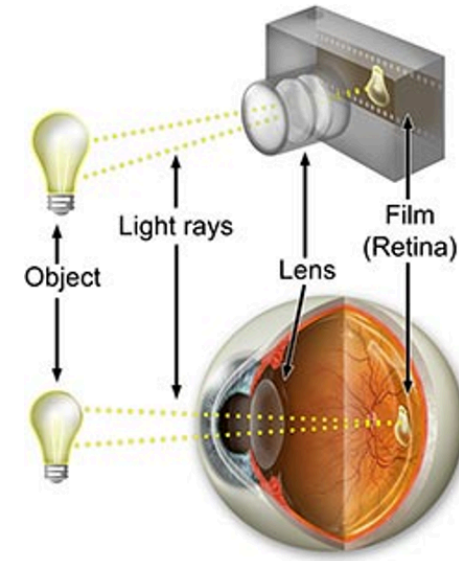
Applications to robotics for medicine, defence, etc.



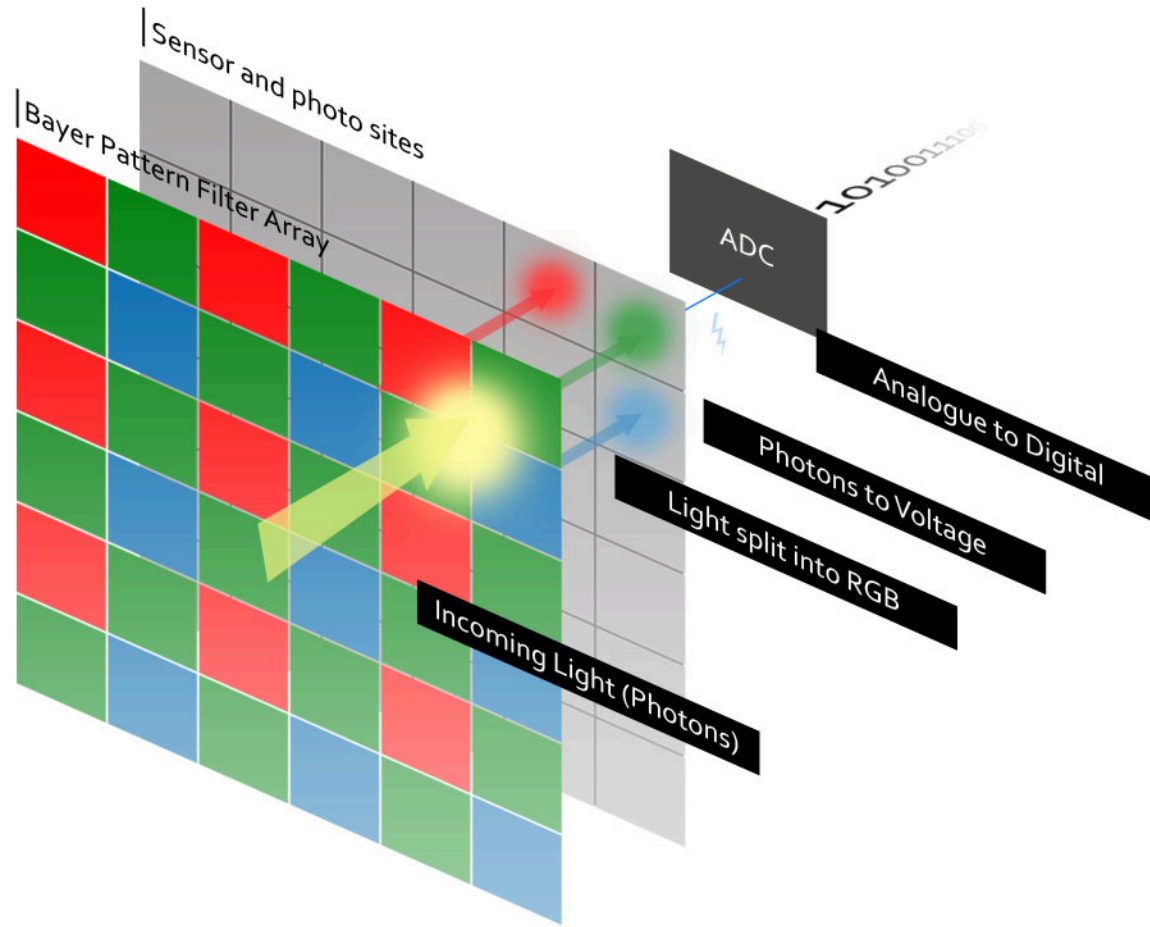
What is Sight?

The Camera Analogy

The Fingertip analogy



Camera Imaging Sensor with Bayer Filter



How Do Computers See?

Cameras take snapshots, with no control over their direction

Computer Vision

How do we teach computers?

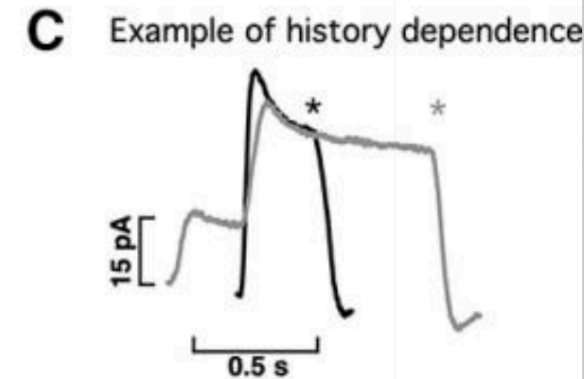
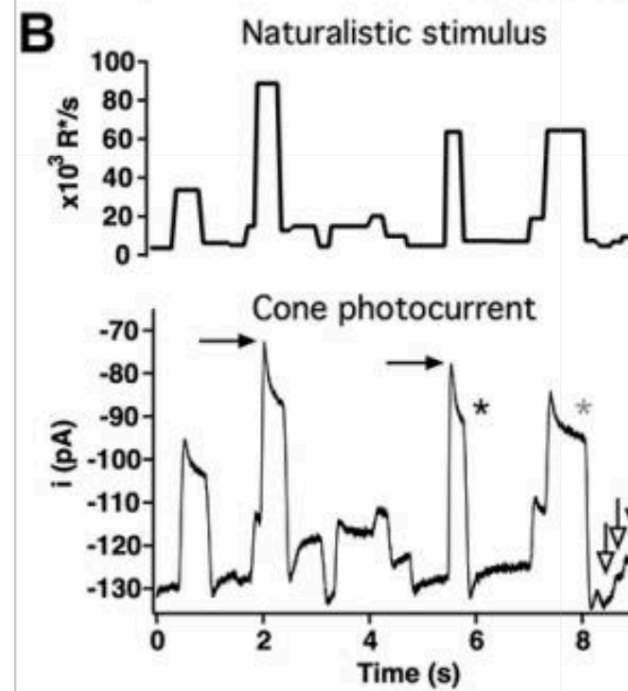
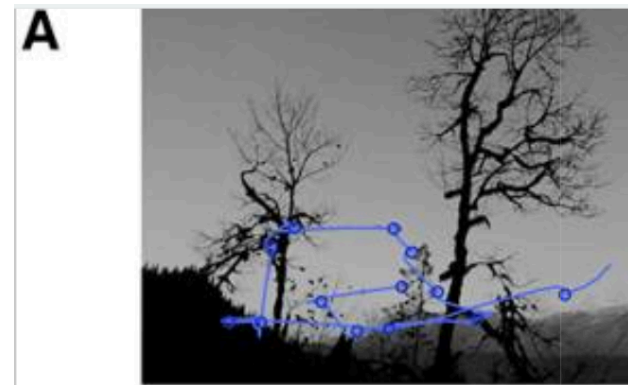


Closing the loop

Software Architecture

Human in \Rightarrow

Human out?



Acknowledgements and Citations