

Deep learning and advanced augmentation toolbox for wind turbine drone inspection analysis

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Drone based inspection

- Cheaper
- Faster
- Safer



<https://abjdrones.com/drone-wind-turbine-inspection/>

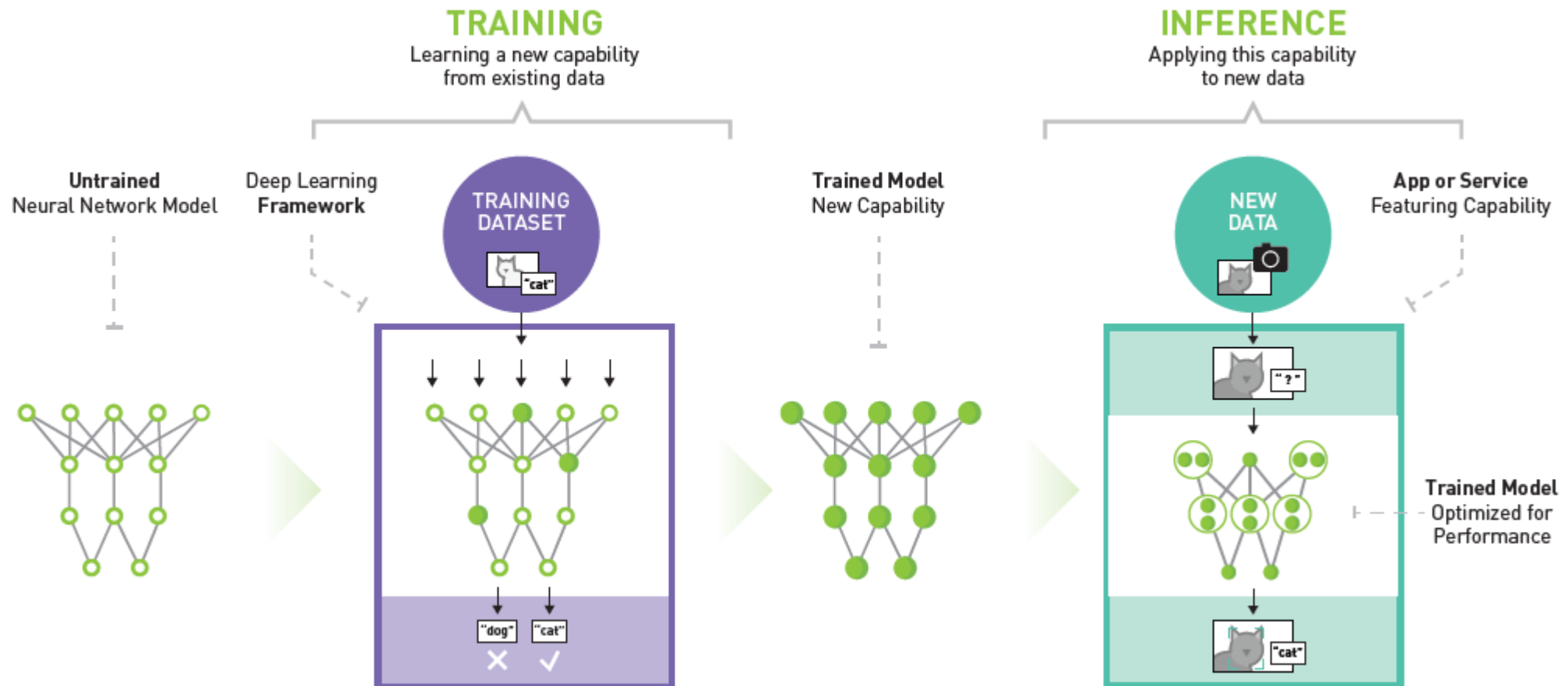
Manual analysis of inspection images

- Tedious, prone to human error
- Not reproducible
- Expensive

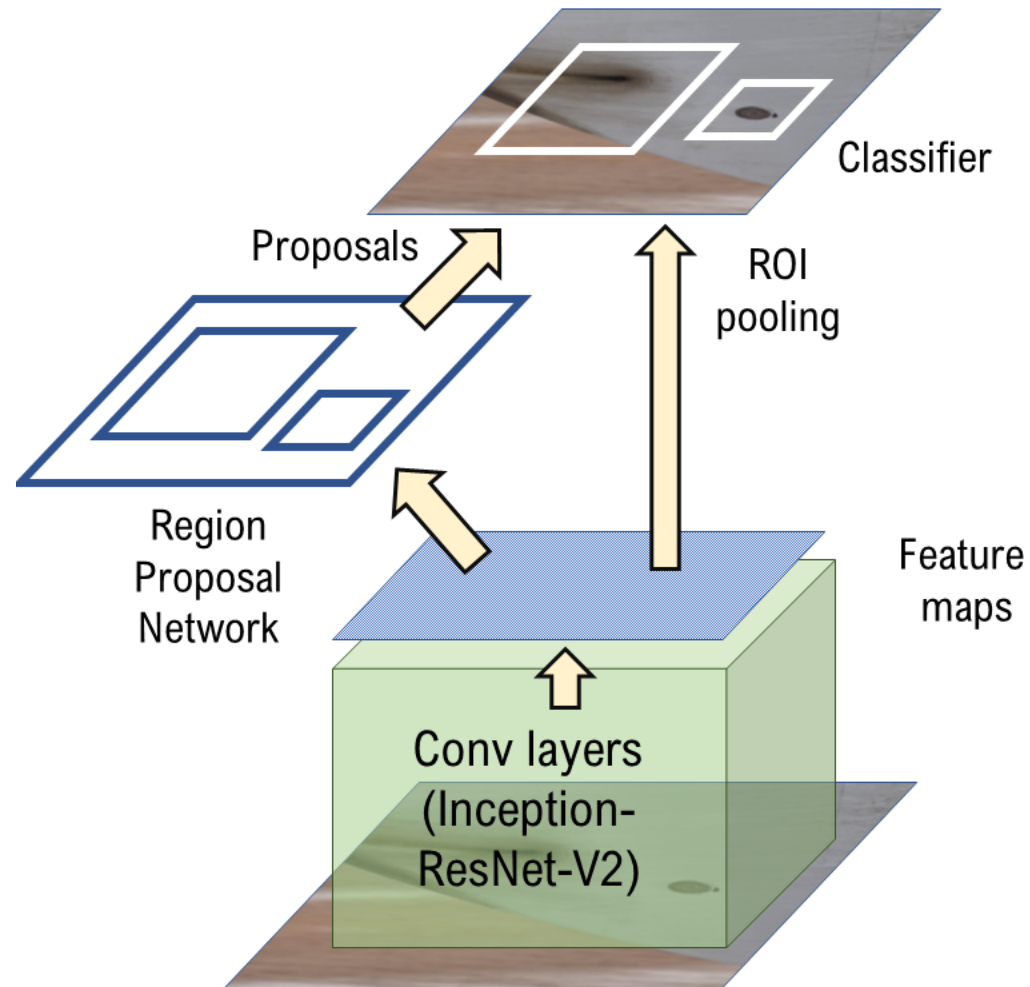


Deep learning - learn by example

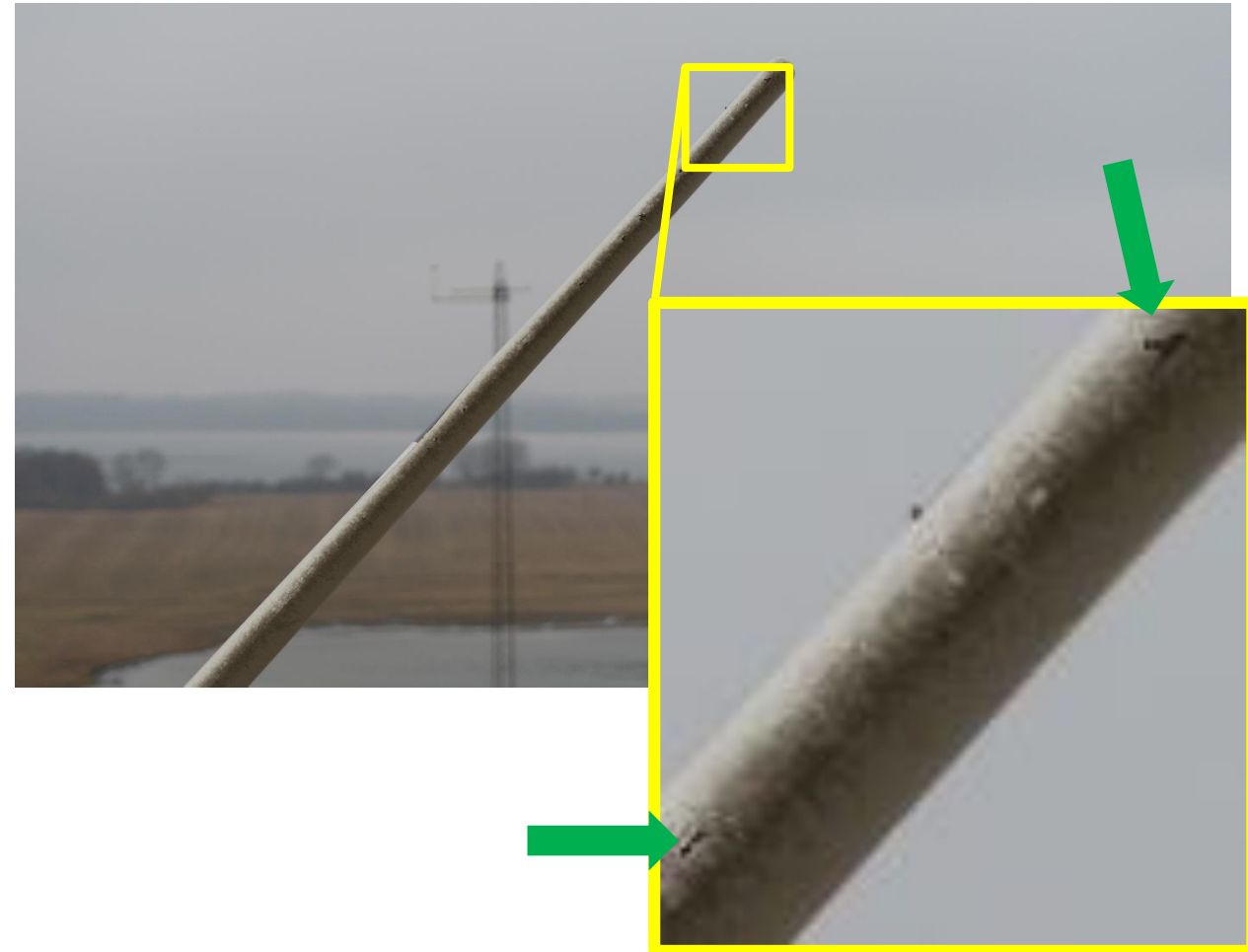
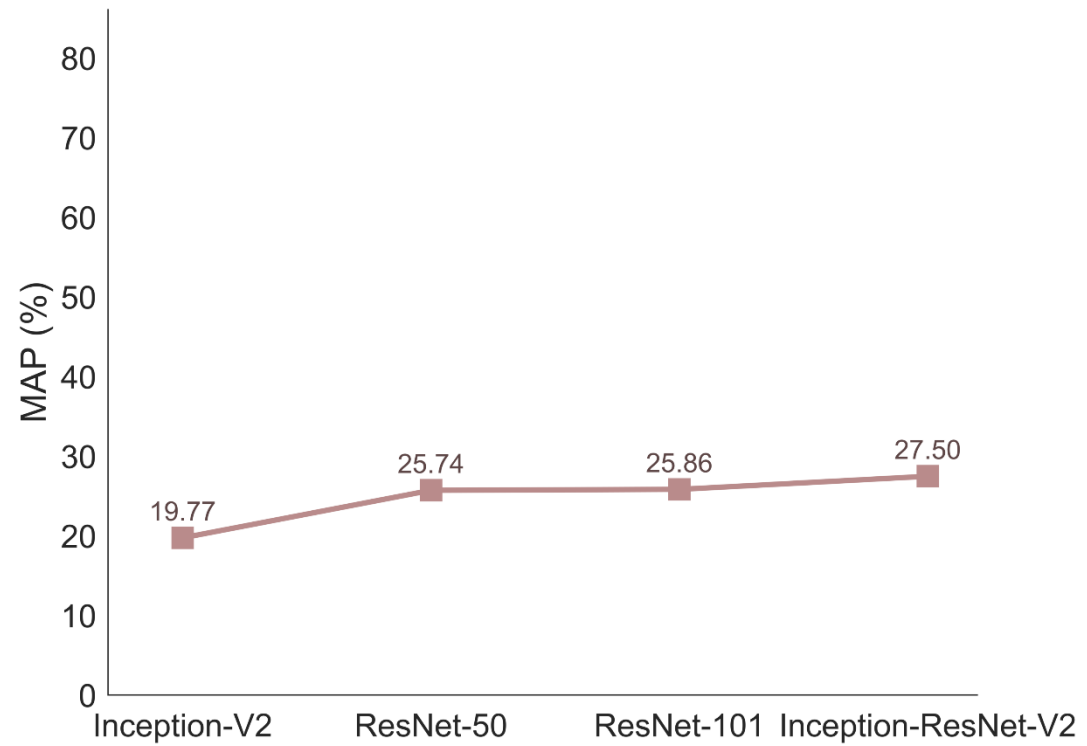
source. Nvidia



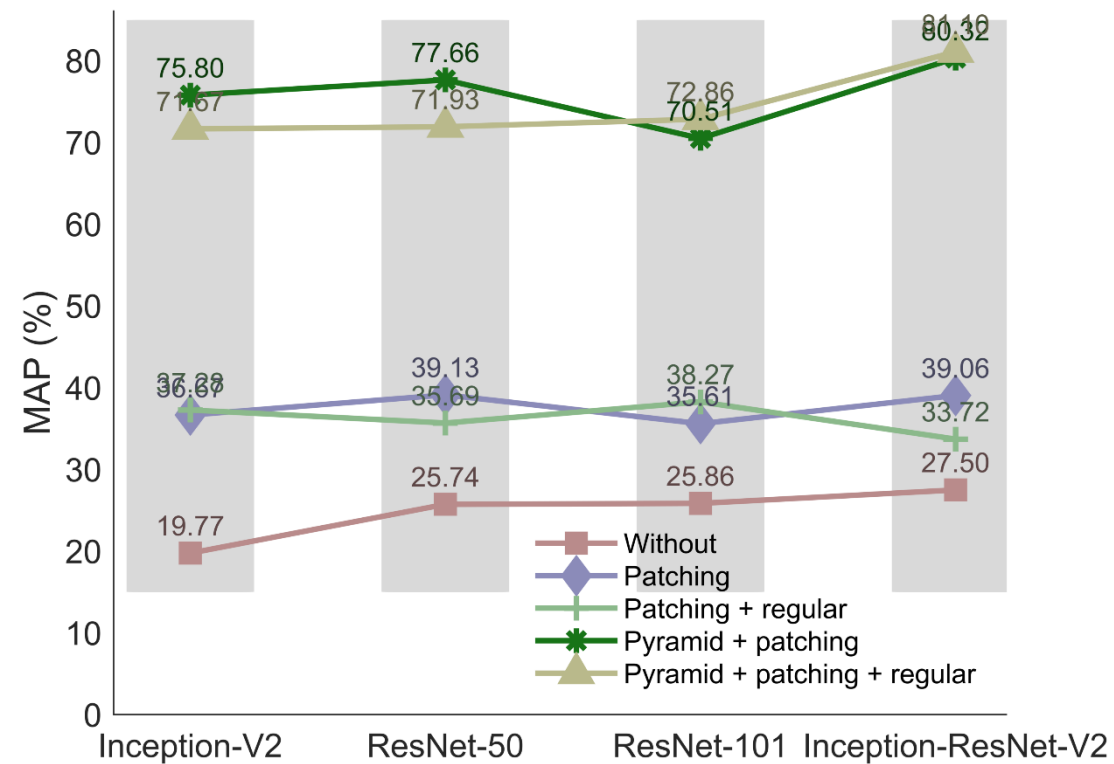
Deep learning - Faster-RCNN



Initial results



With pyramid, patching and regular augmentation



Thanks

