Learning to Refine Object Segments

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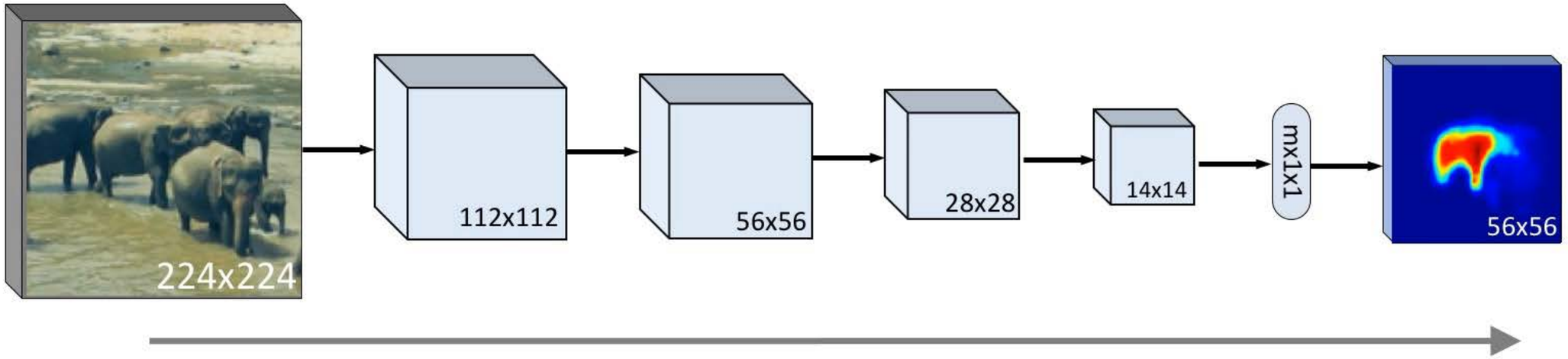
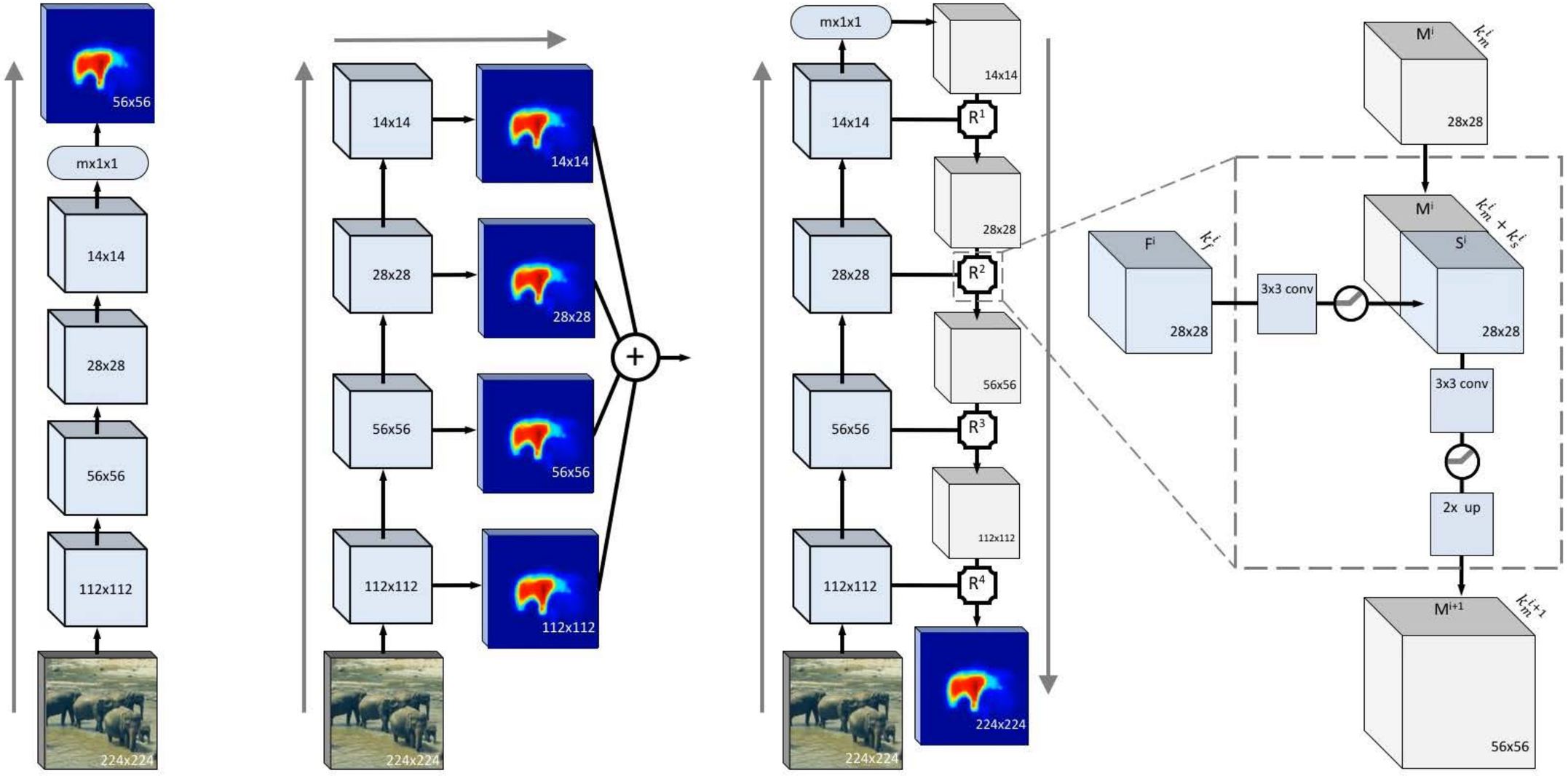
Main Goal: Improve Object Instance Segmentation



- Increase in depth → ✓ object semantics information
  ✗ spatial information

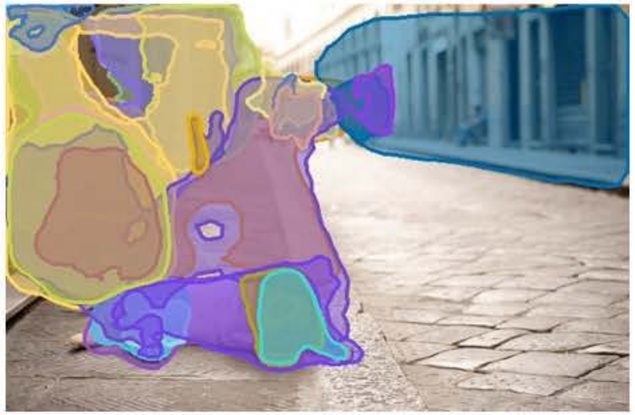
- Solution: use information from all layers
  Top-down refinement to sharpen output with low-level features

Architectures for Object Instance Segmentation

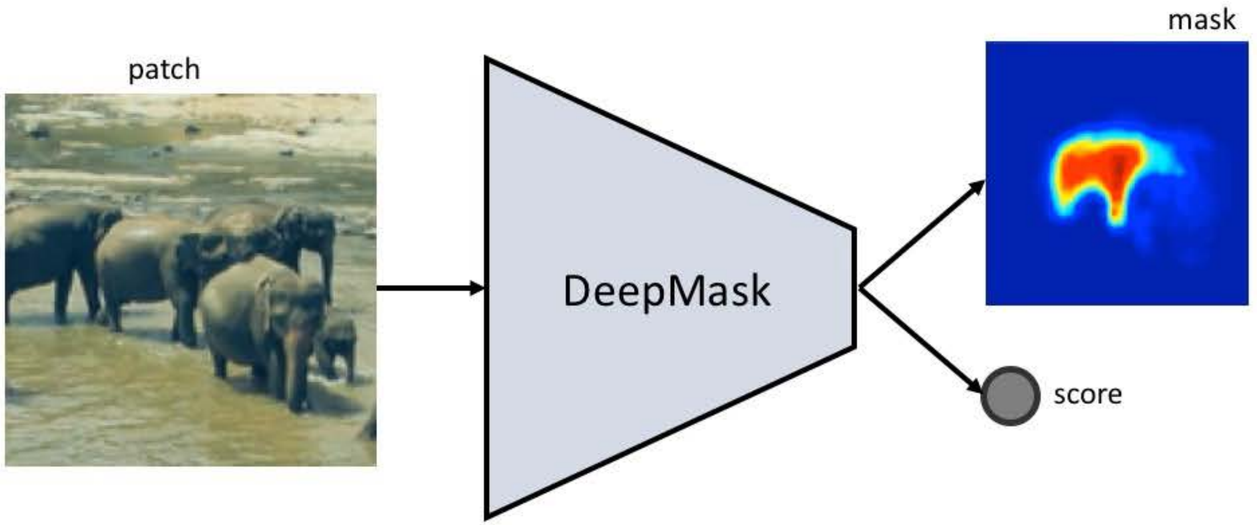


Object Proposals

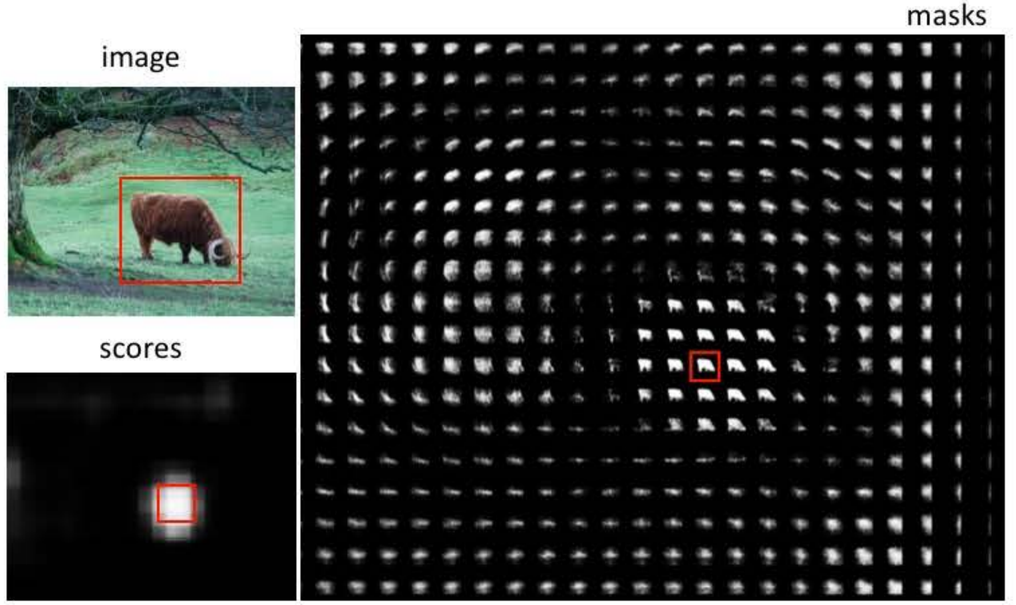
- Generate a set of regions that are likely to contain objects



- DeepMask for Object Proposals (NIPS15)



predict mask/score for *center* object



sliding window detection

Object Proposals

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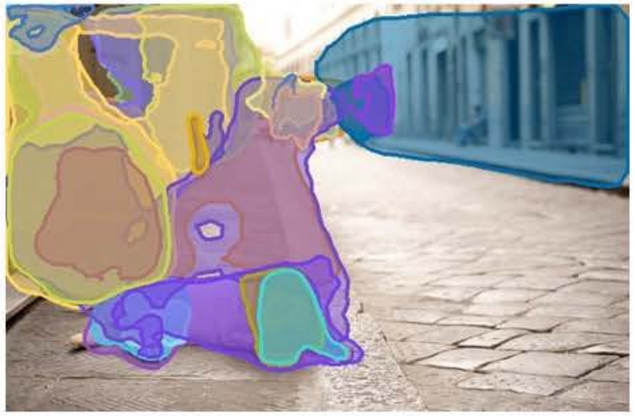

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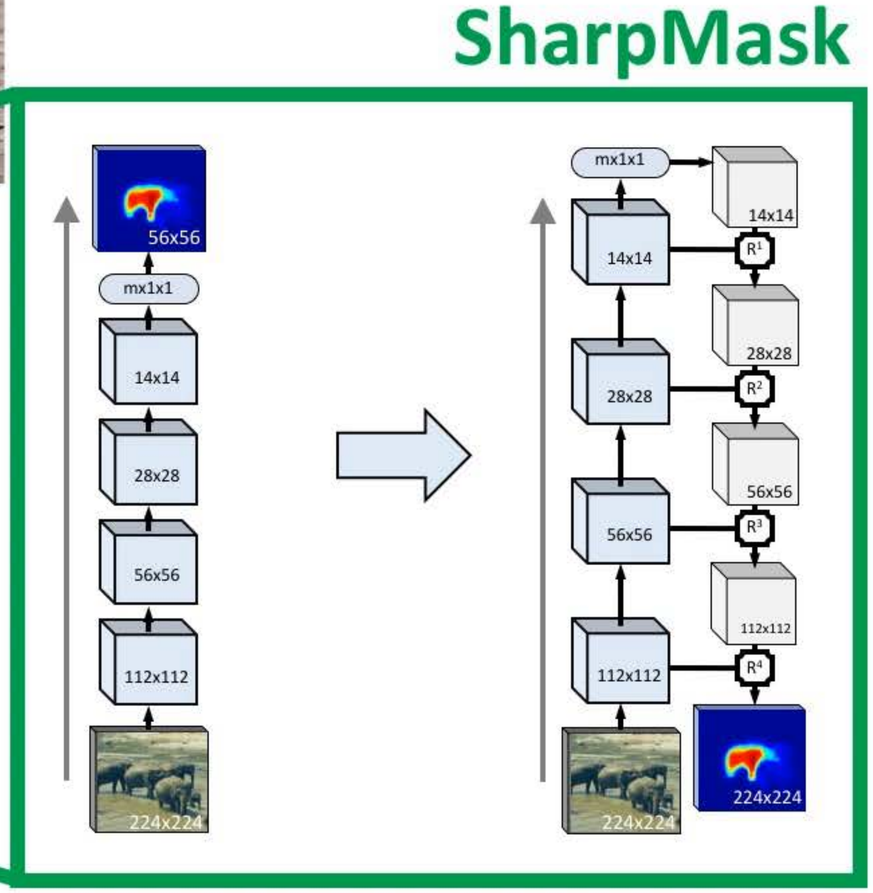




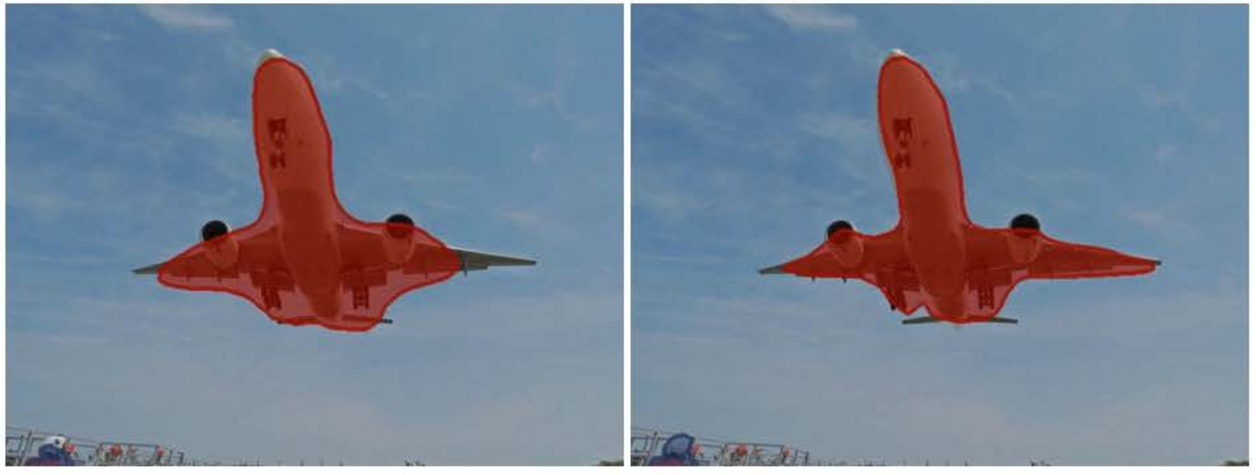


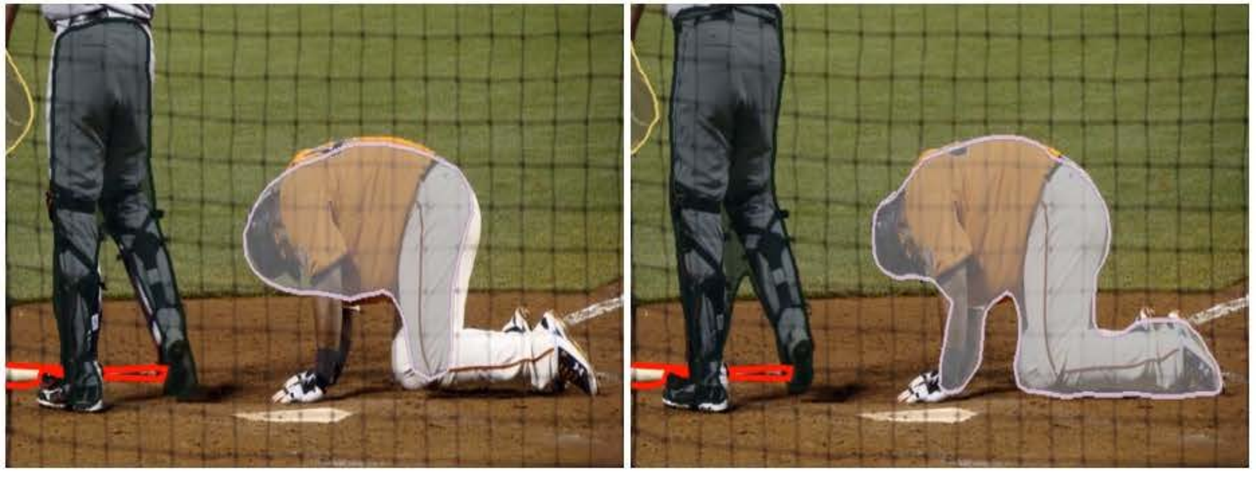

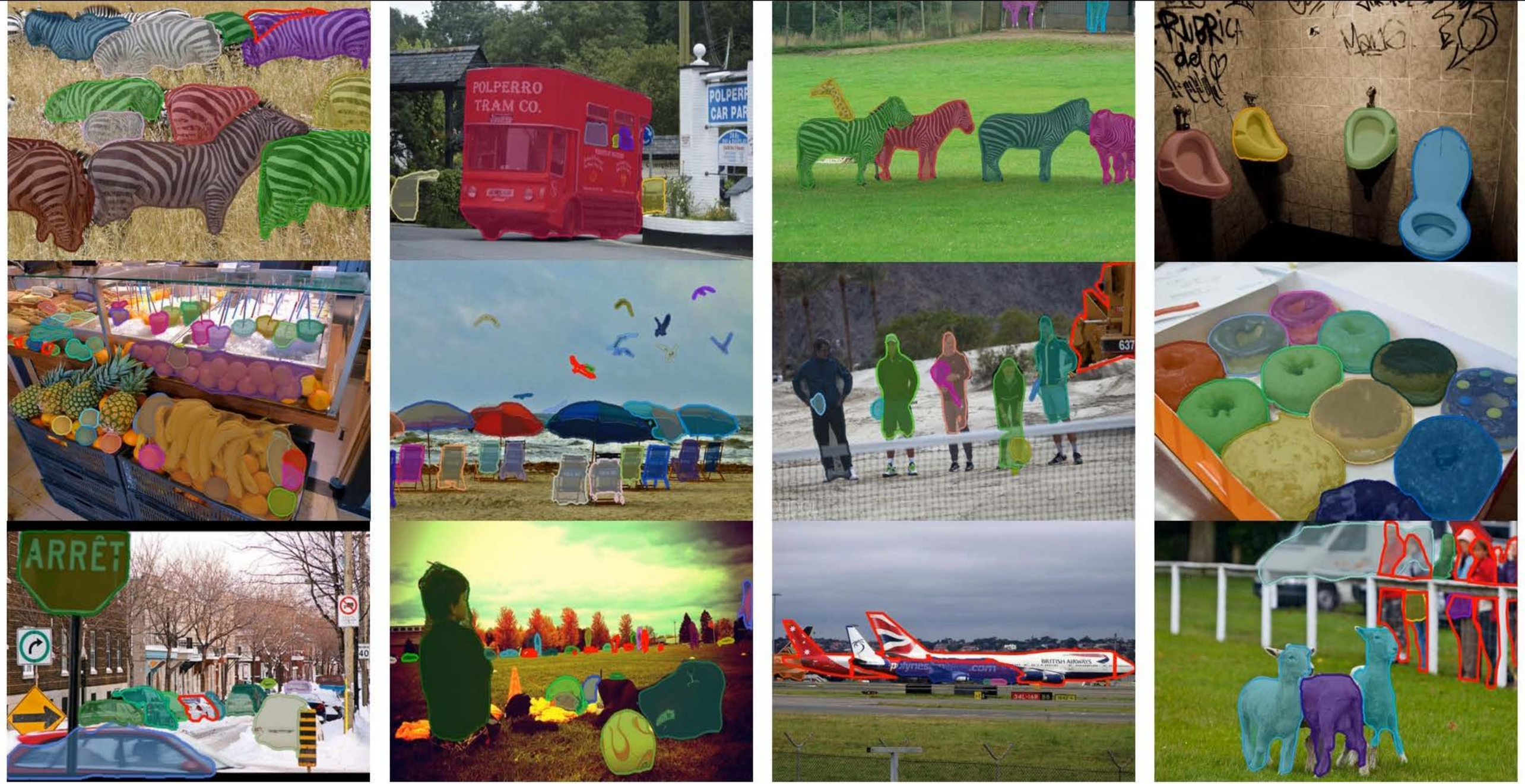

- Novel architecture for object instance segmentation
- Simple, fast, general network for pixel-labeling tasks
- State of the art proposal and detection performance
- Source code available@ github

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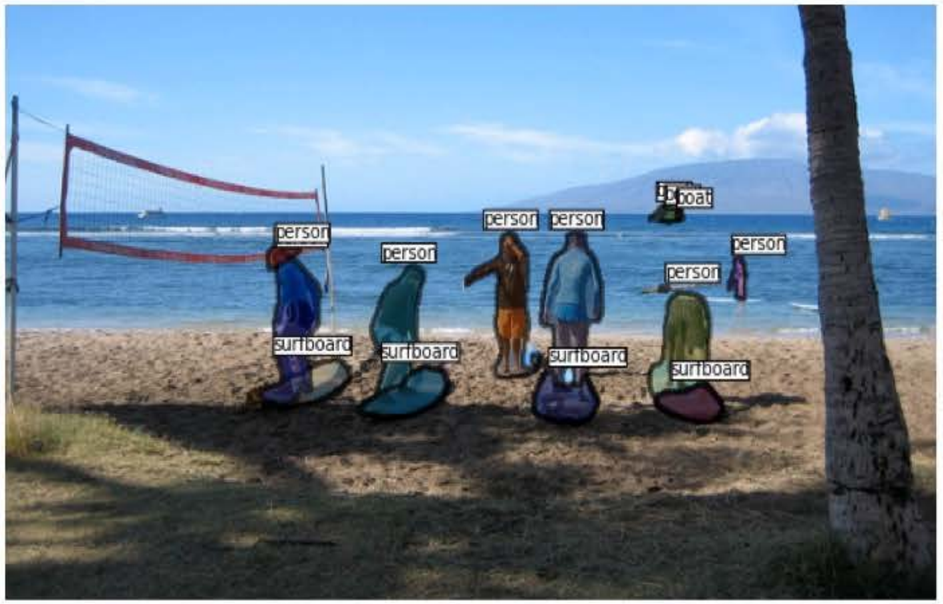

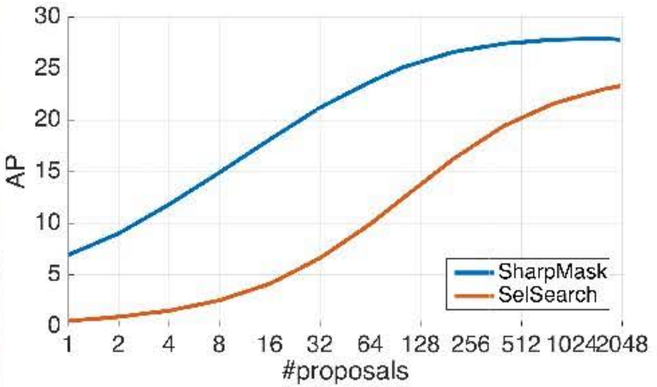

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