

# **Guided Tour of Machine Learning in Finance**

**ML as a foundation of AI - part III**

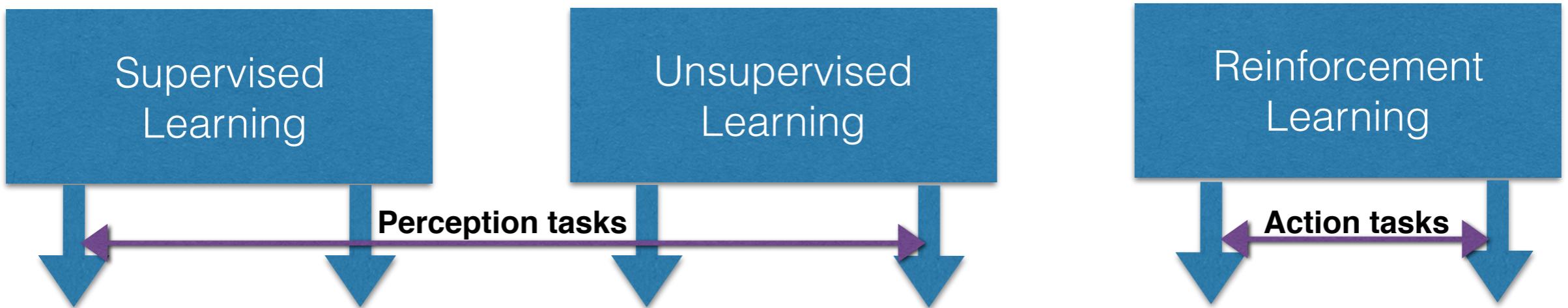
Igor Halperin

NYU Tandon School of Engineering, 2017

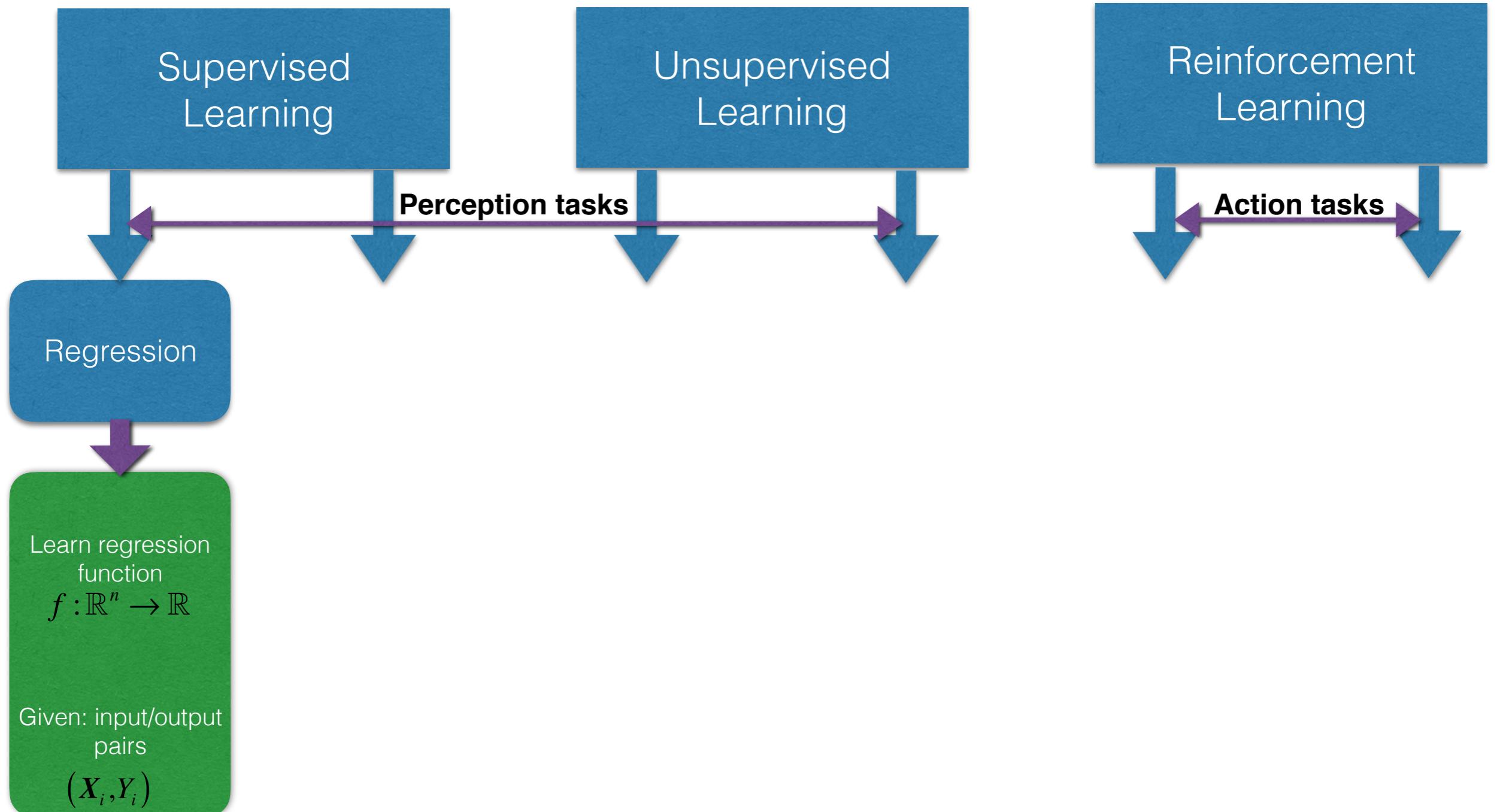
# Machine Learning landscape



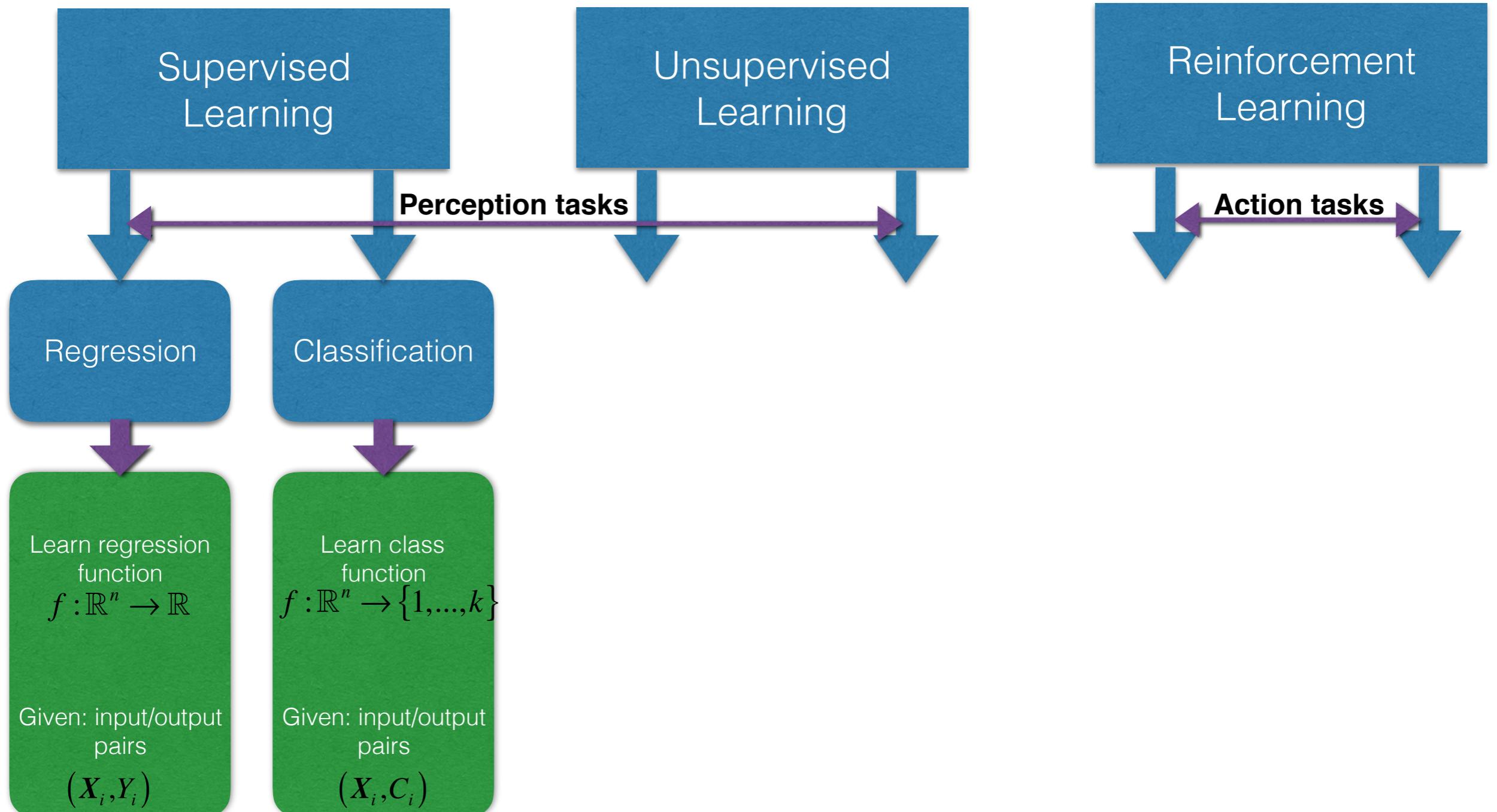
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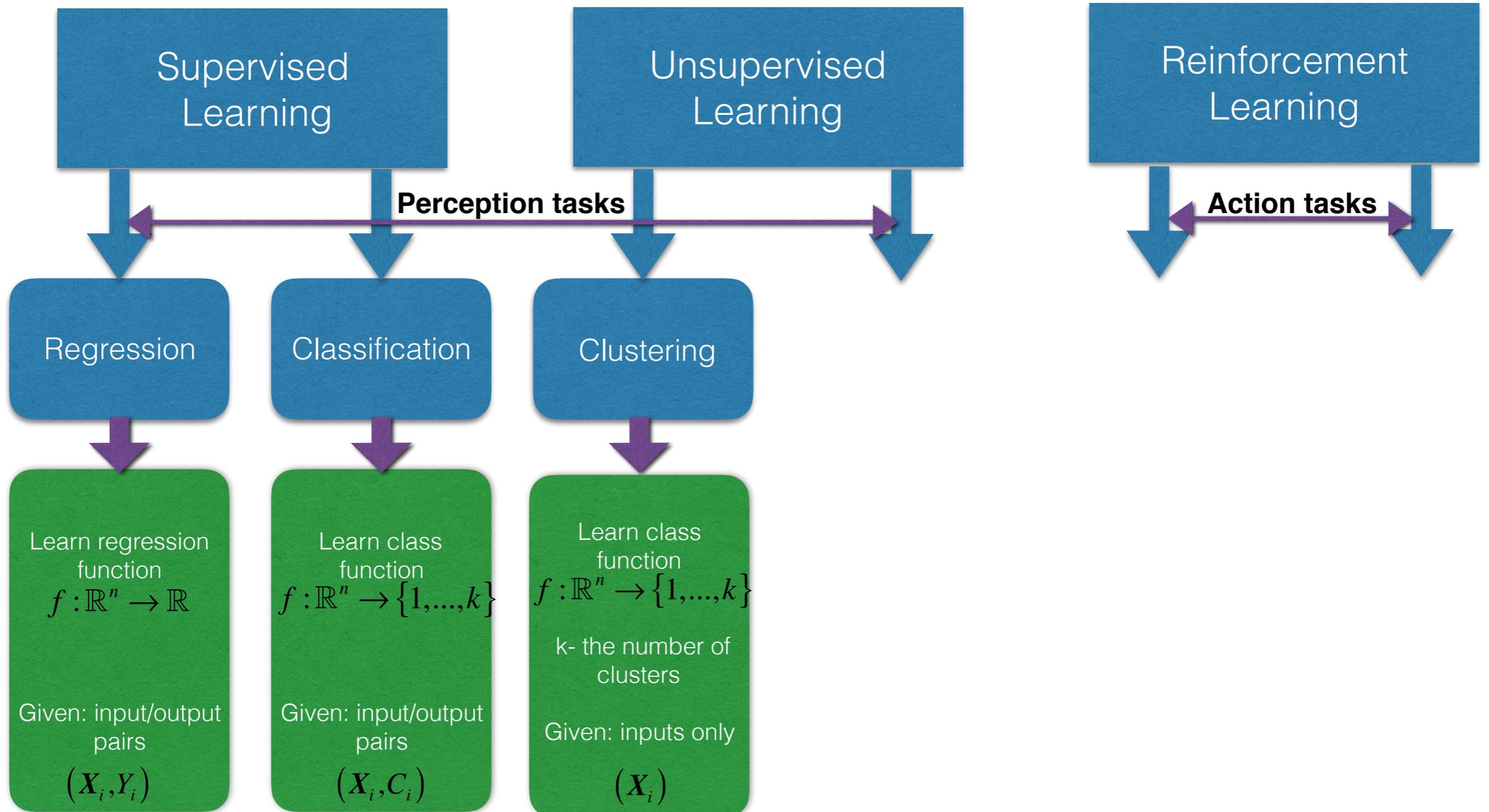
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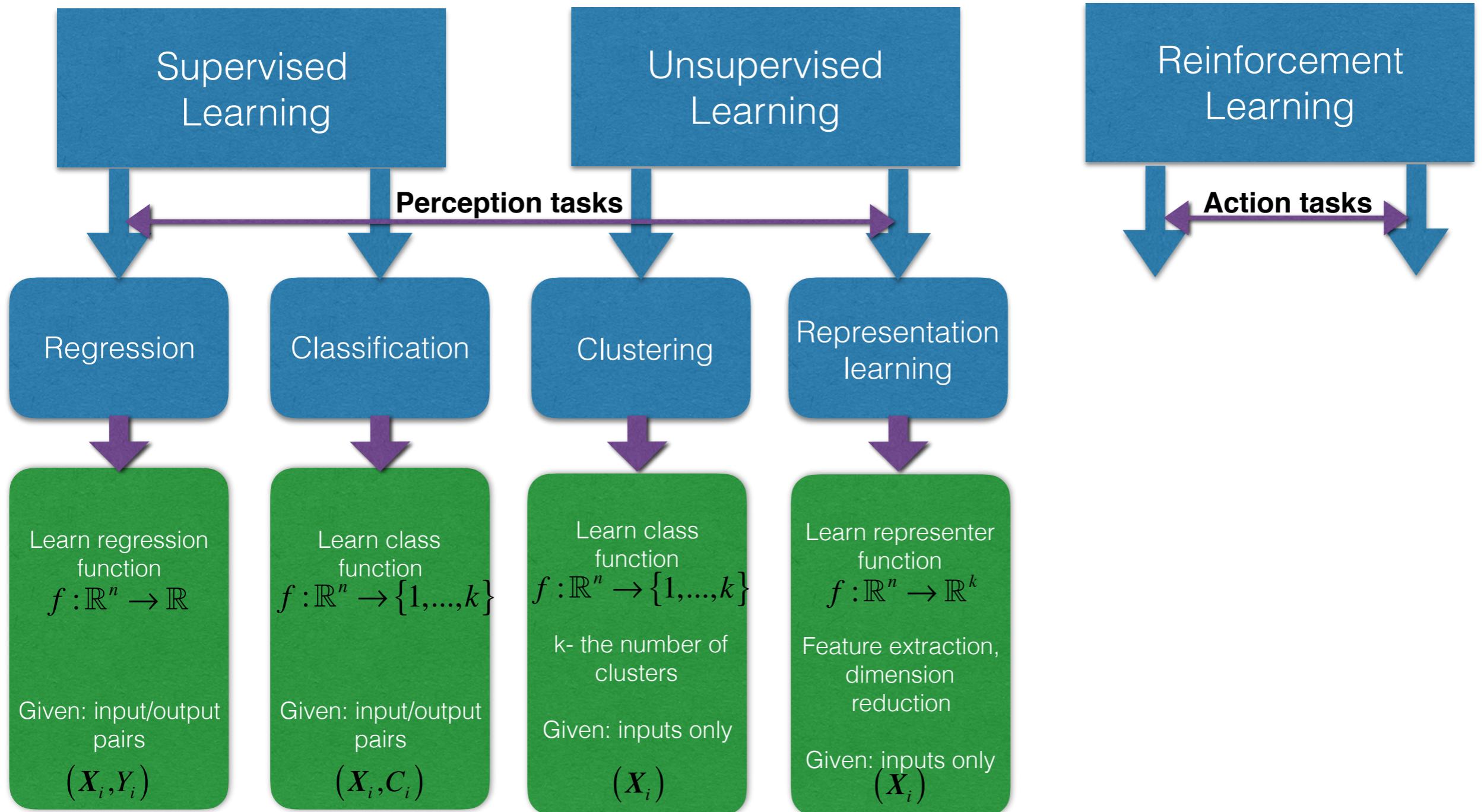
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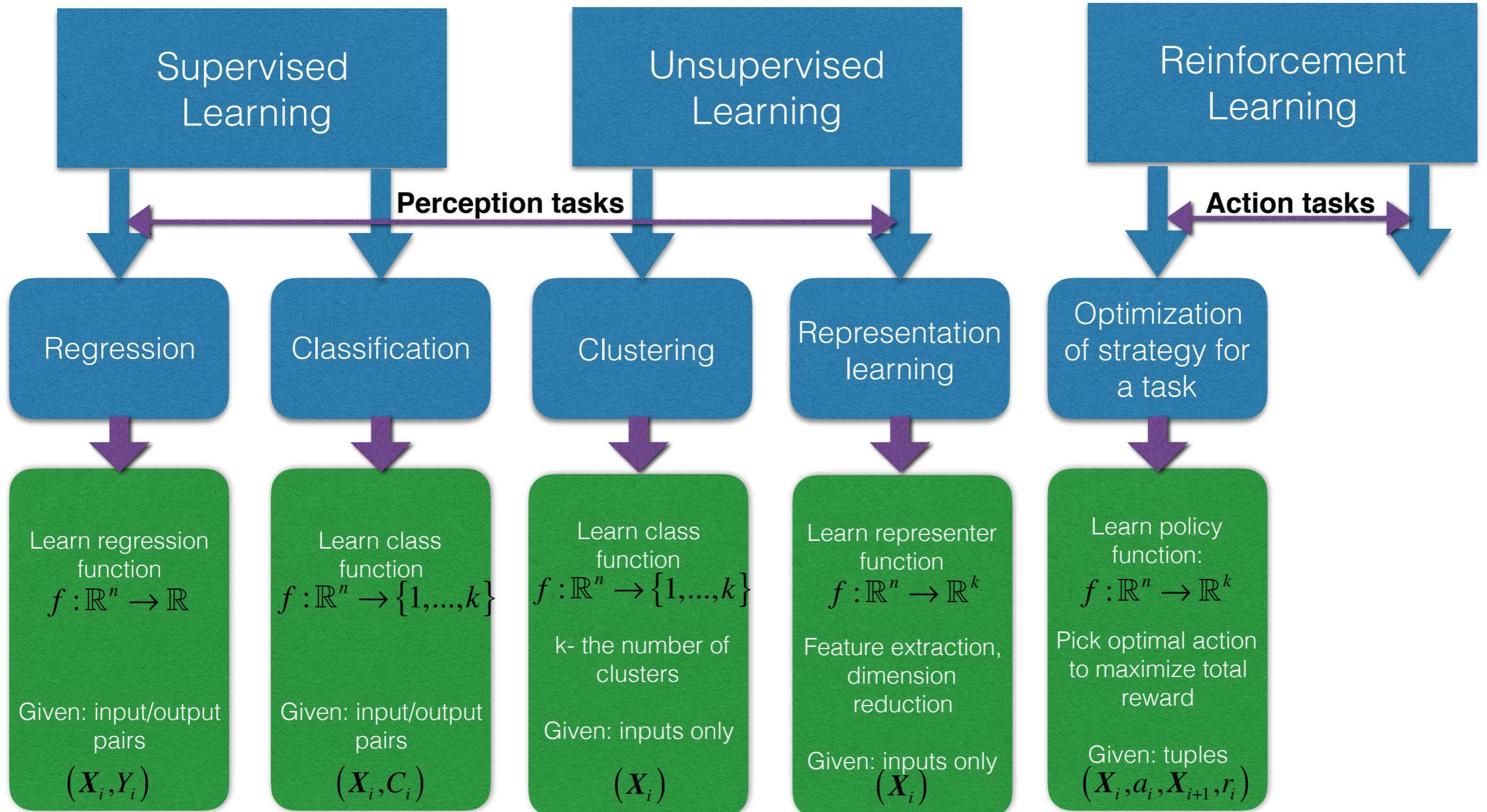
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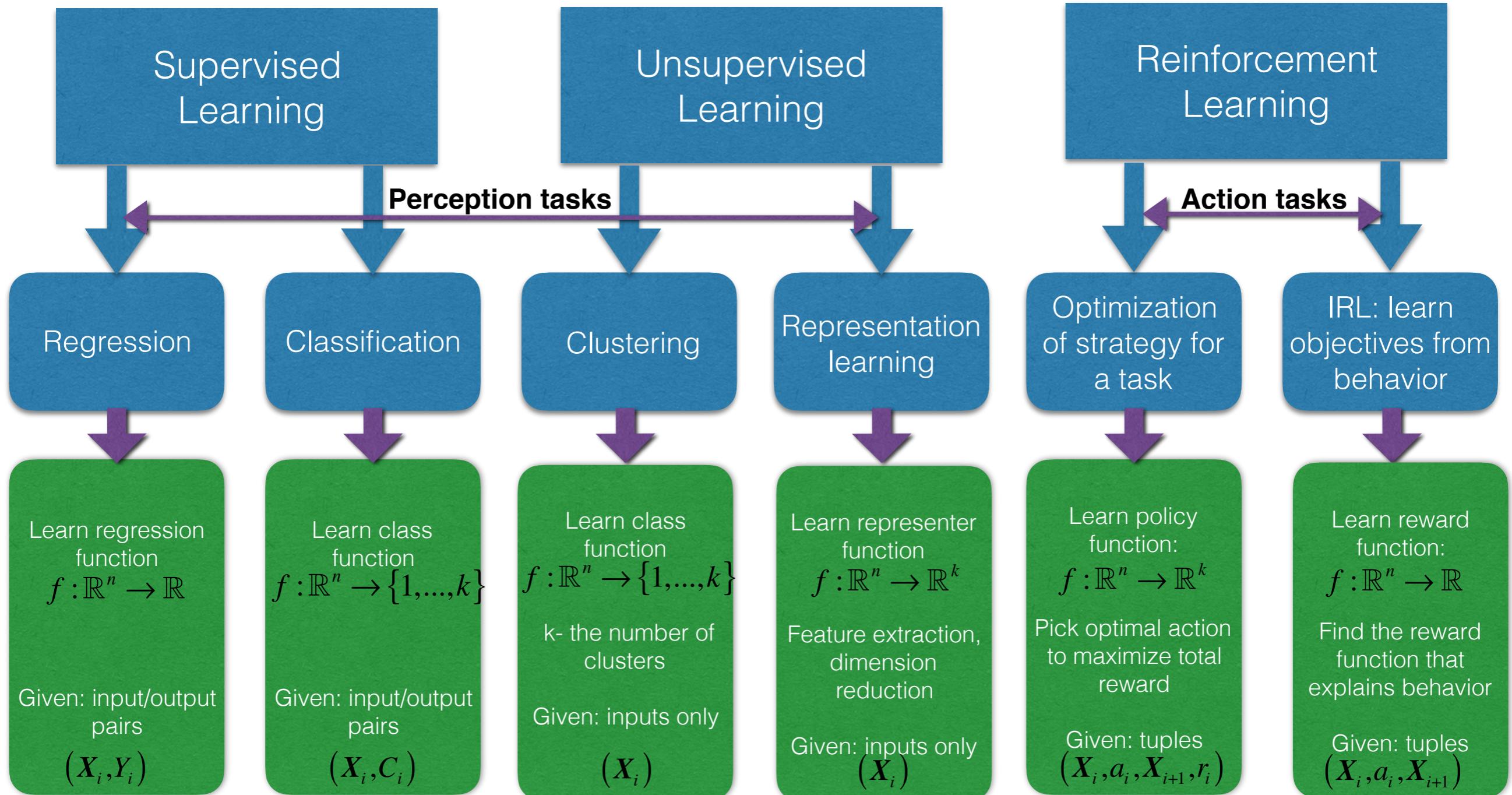
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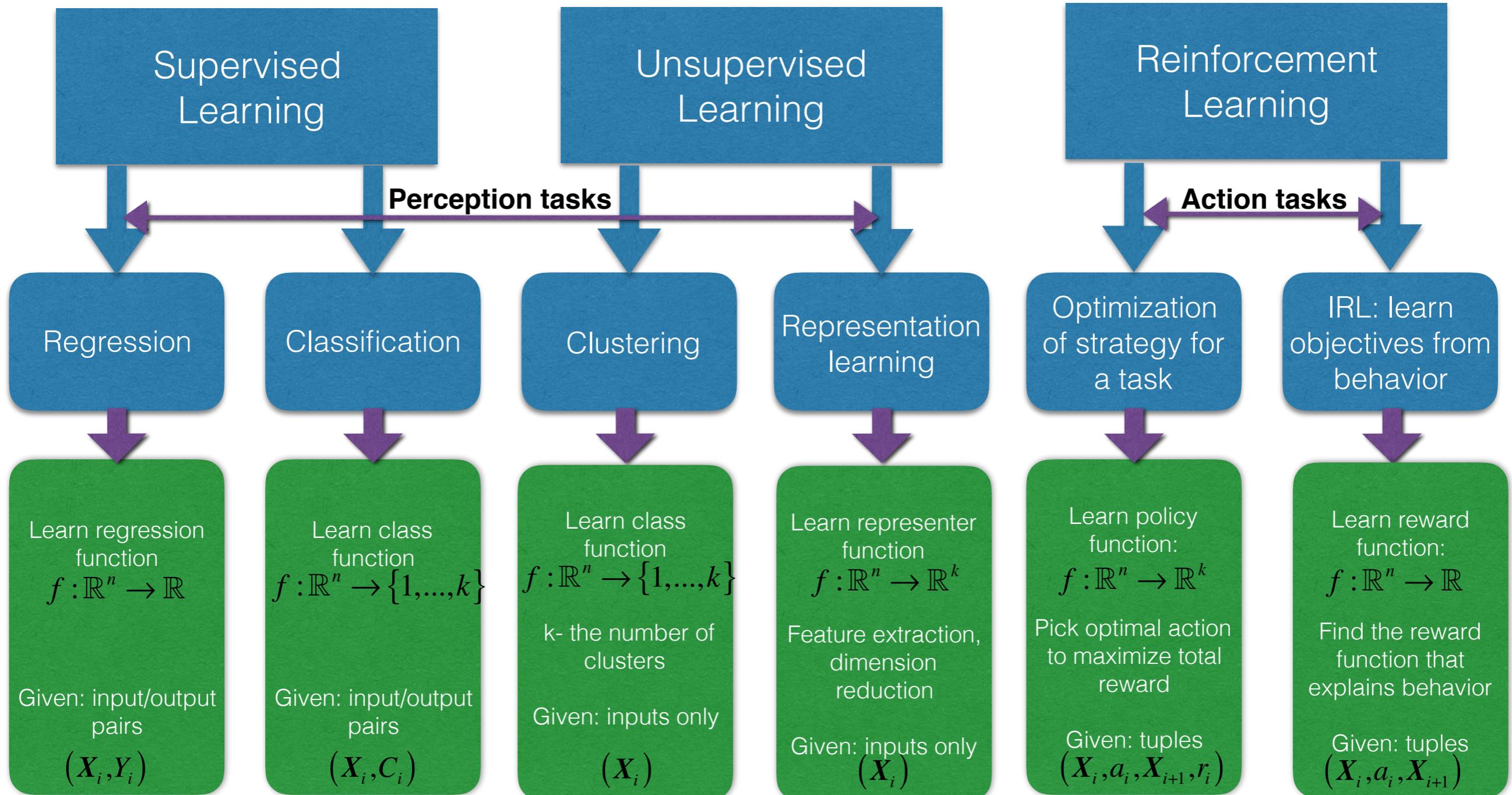
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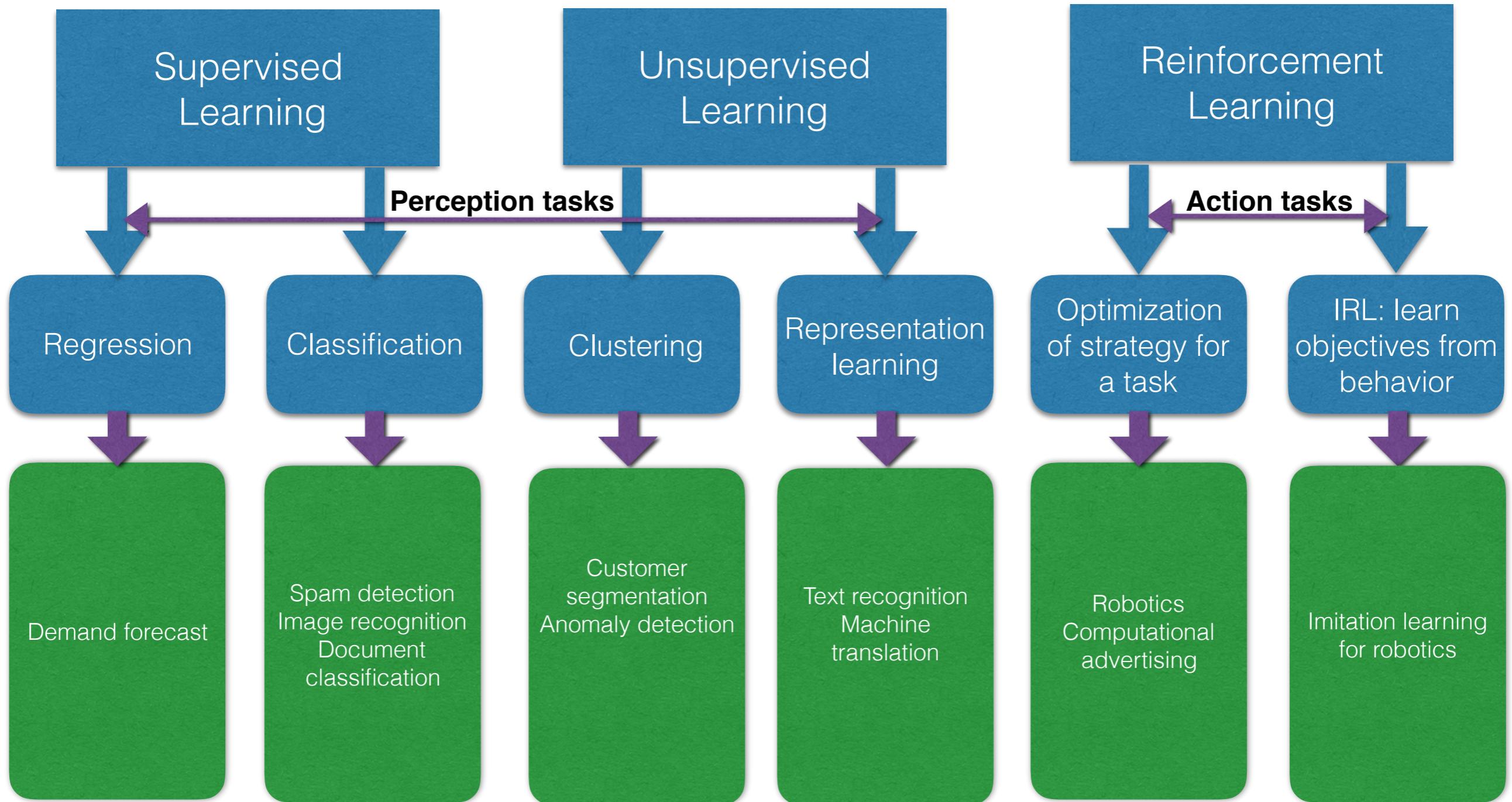
# Machine Learning landscape



## Additional categories:

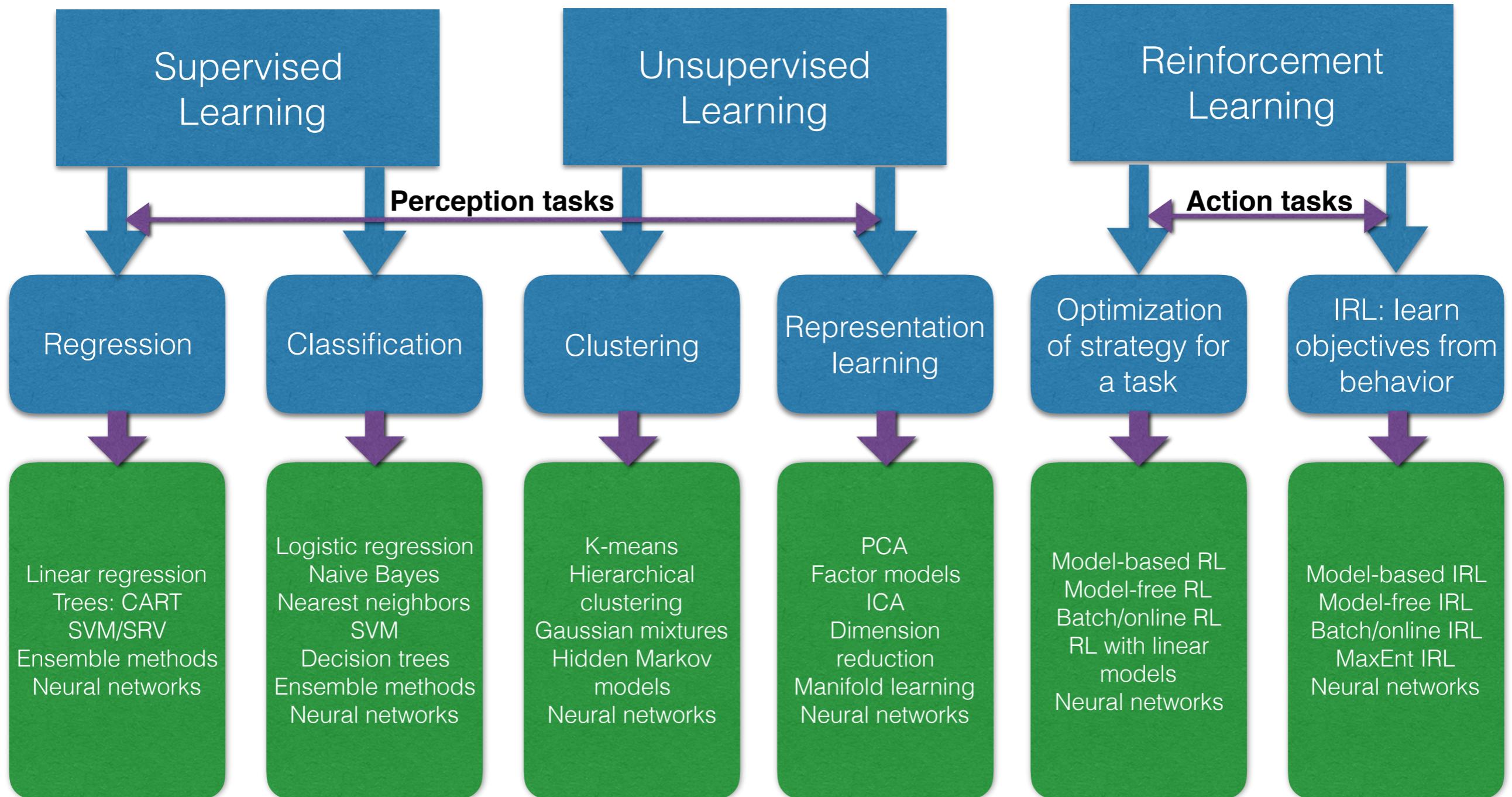
- Semi-supervised learning
- Active learning
- Sequence modeling
- RL methods for Supervised and Unsupervised Learning

# Machine Learning: examples



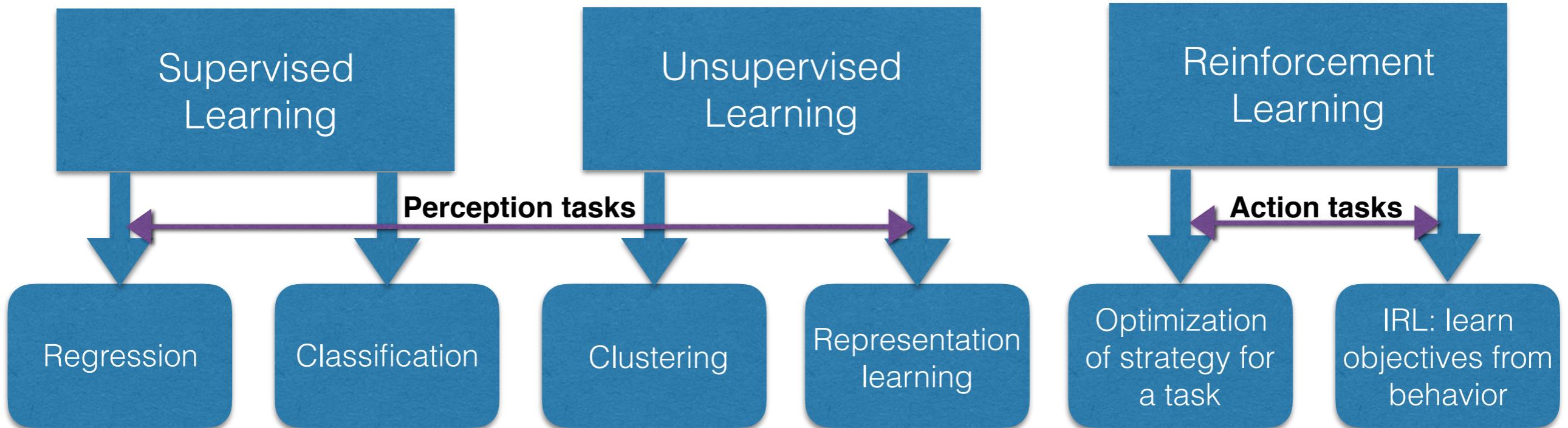
- These are general industrial applications
  - Will be referred to as “ML in Tech” for short

# Machine Learning: methods

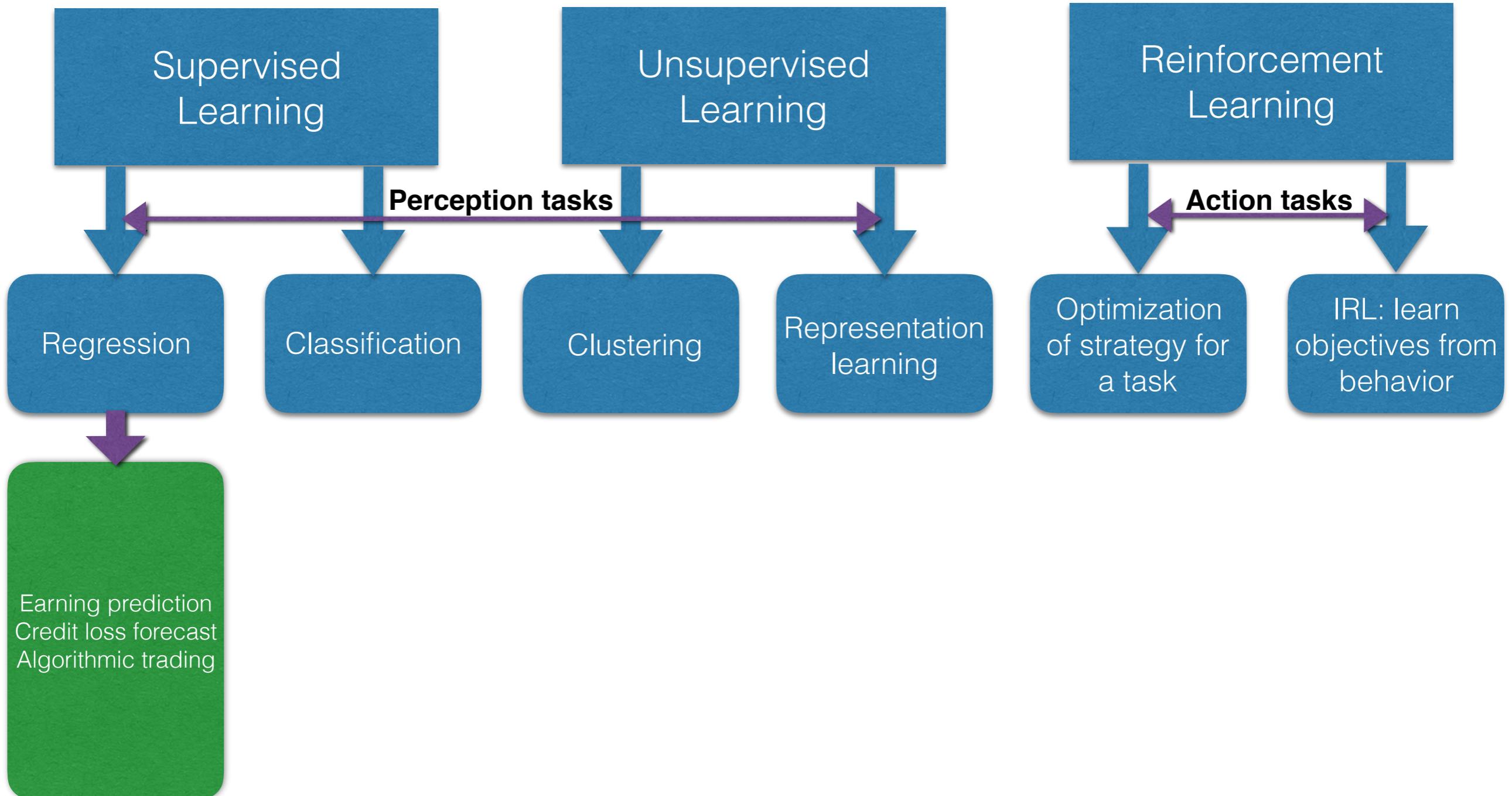


- **Neural networks** is the most universal (and scalable) approach
- **Deep Learning** revolution (2007-present)!

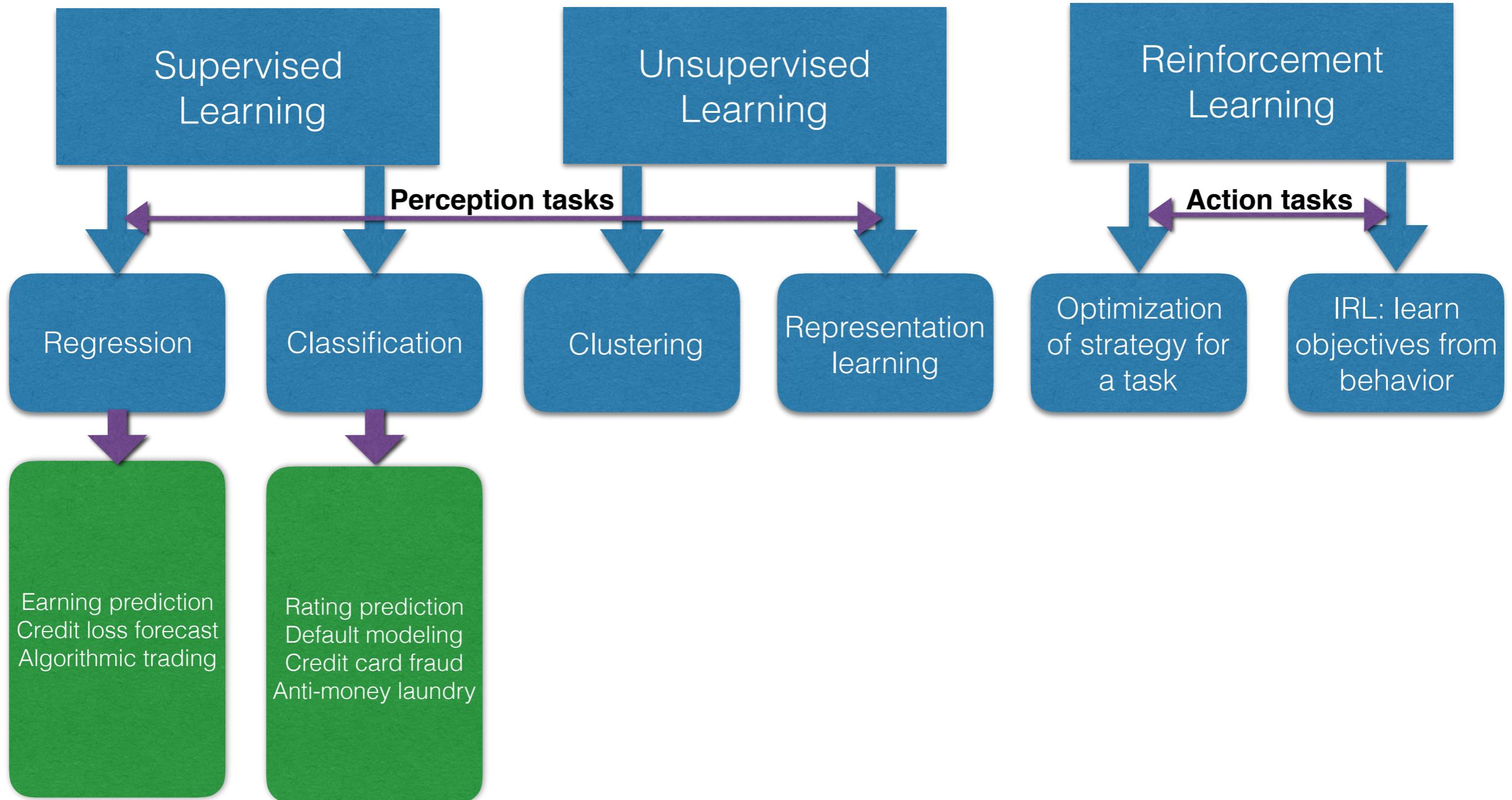
# Machine Learning in Finance



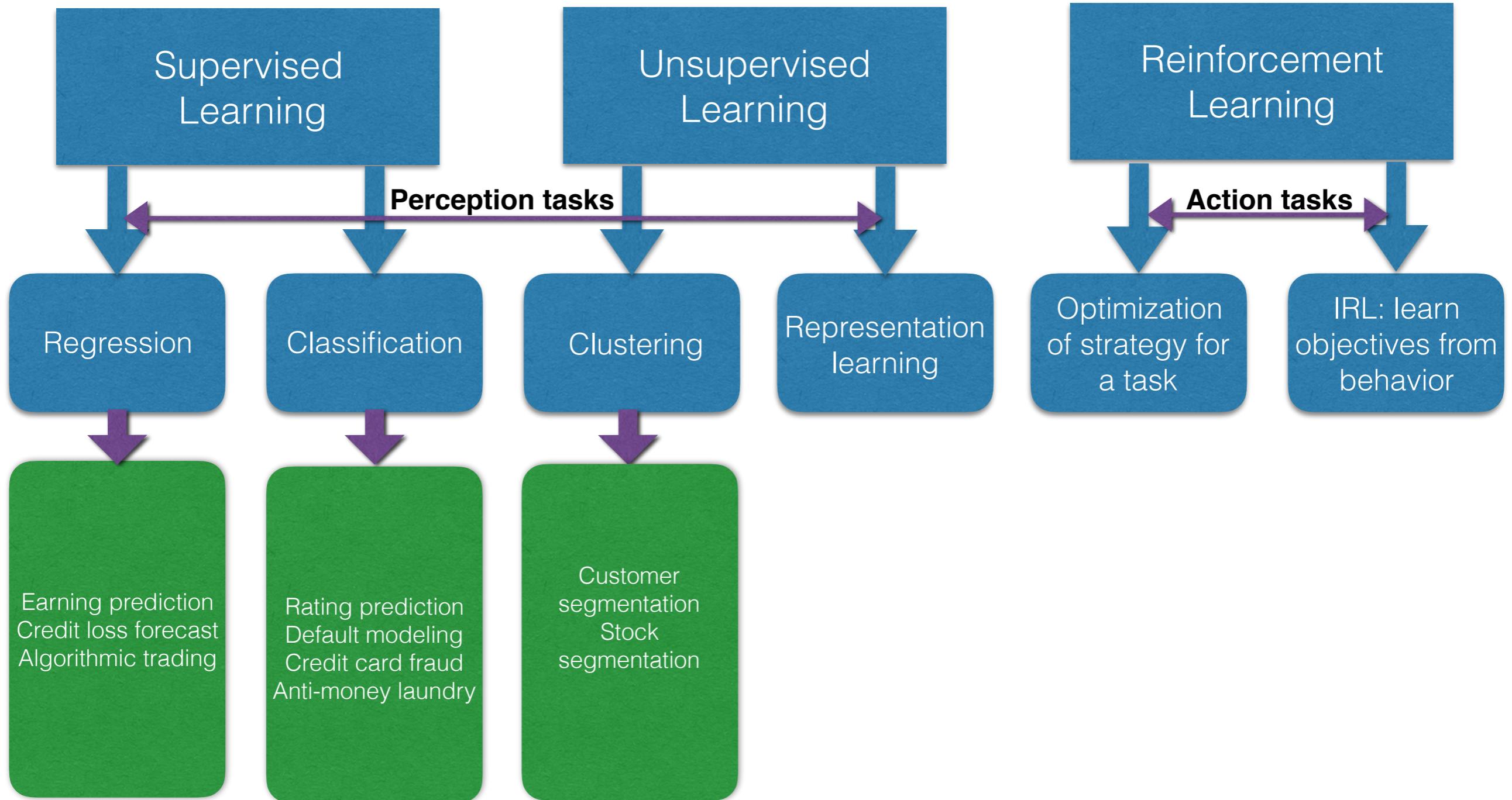
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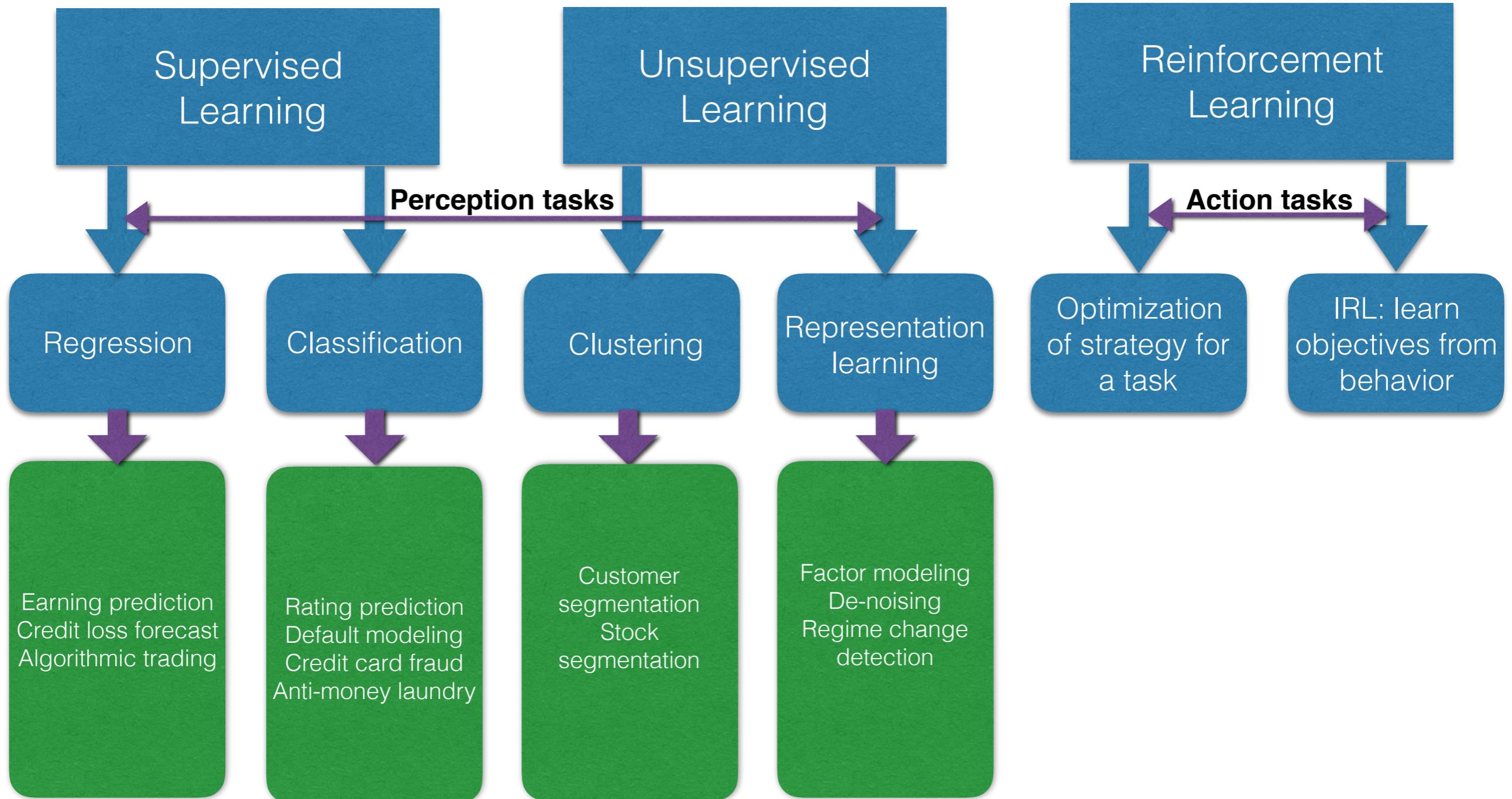
# Machine Learning in Finance



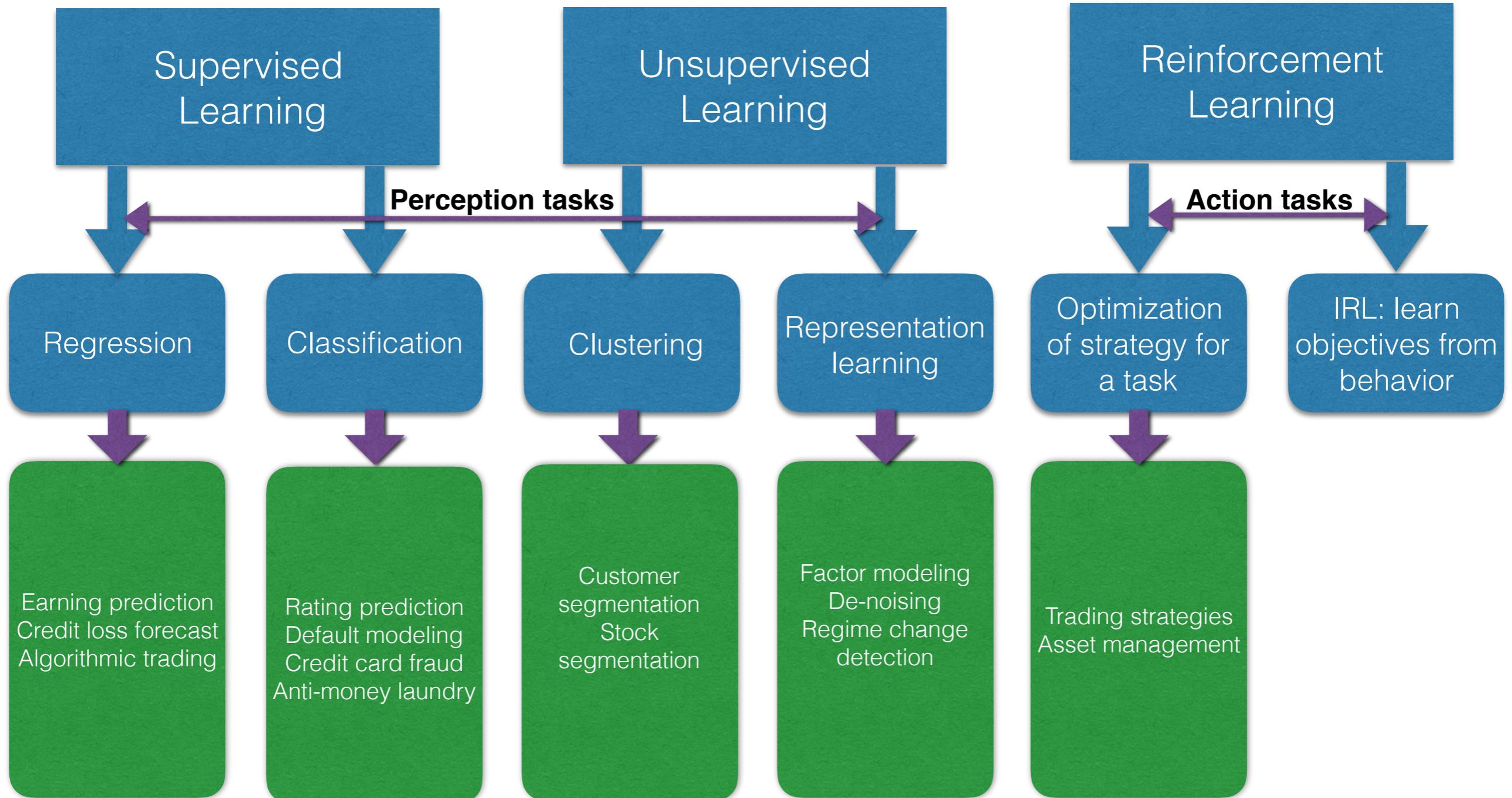
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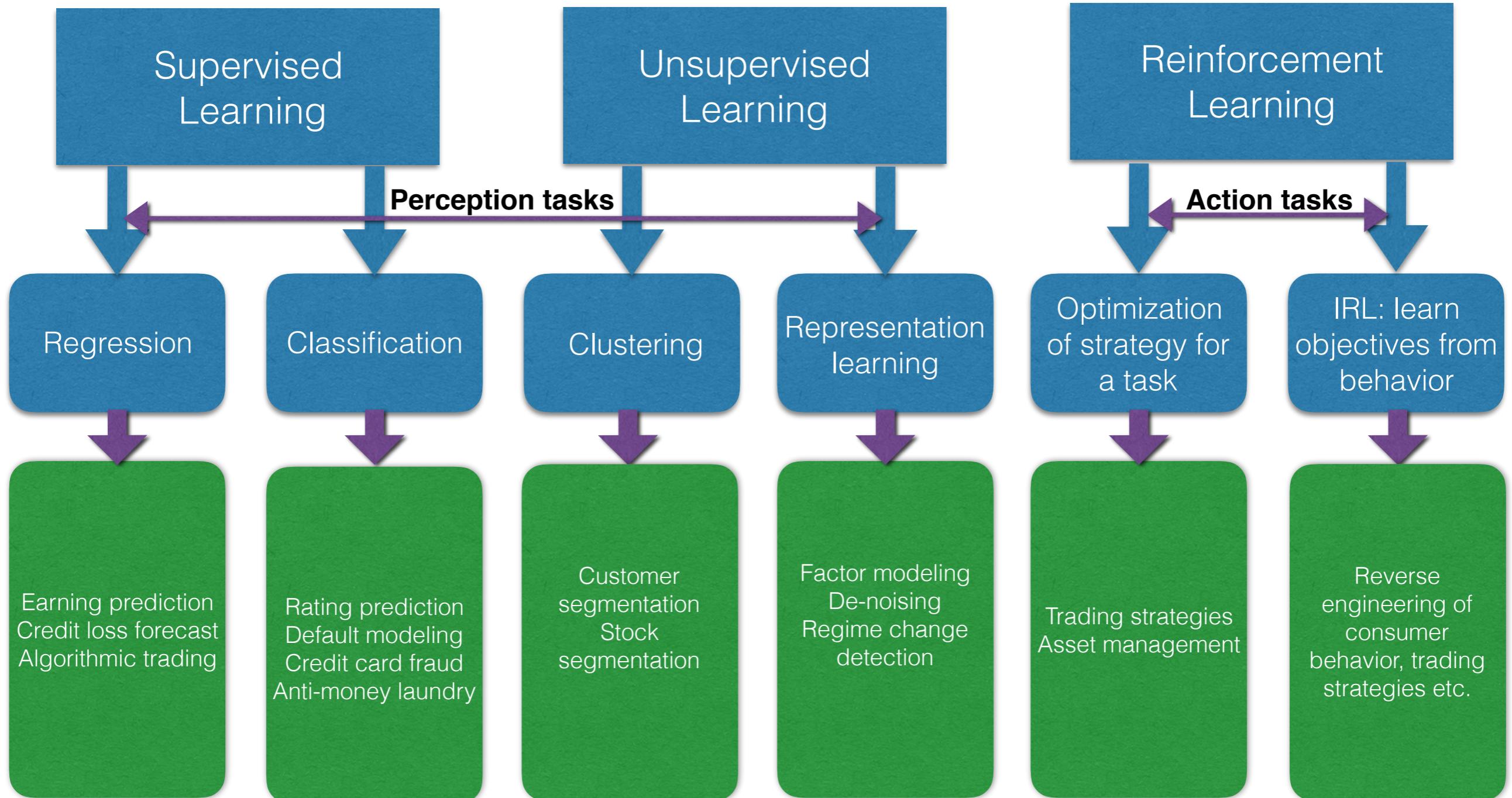
# Machine Learning in Finance



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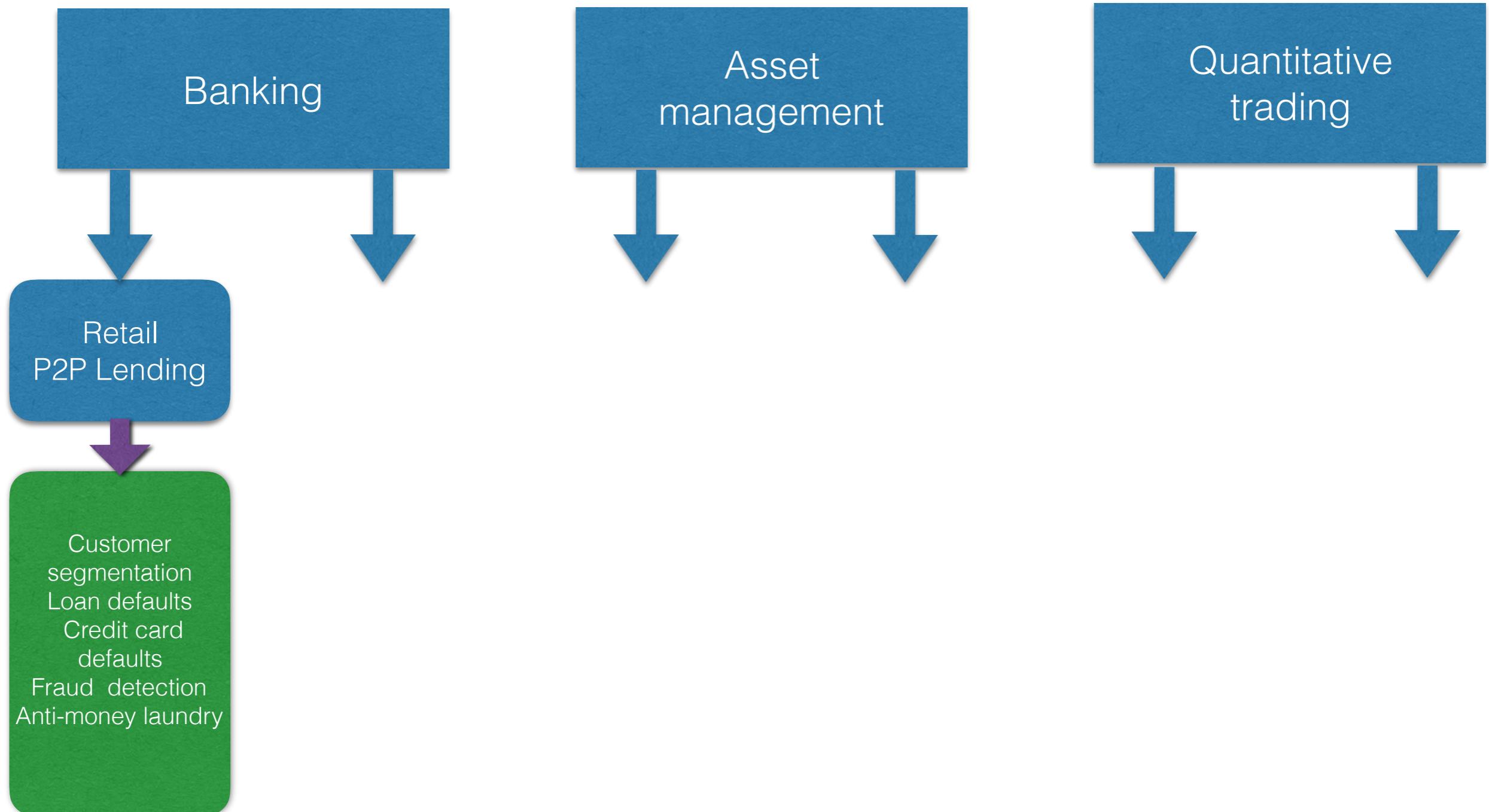
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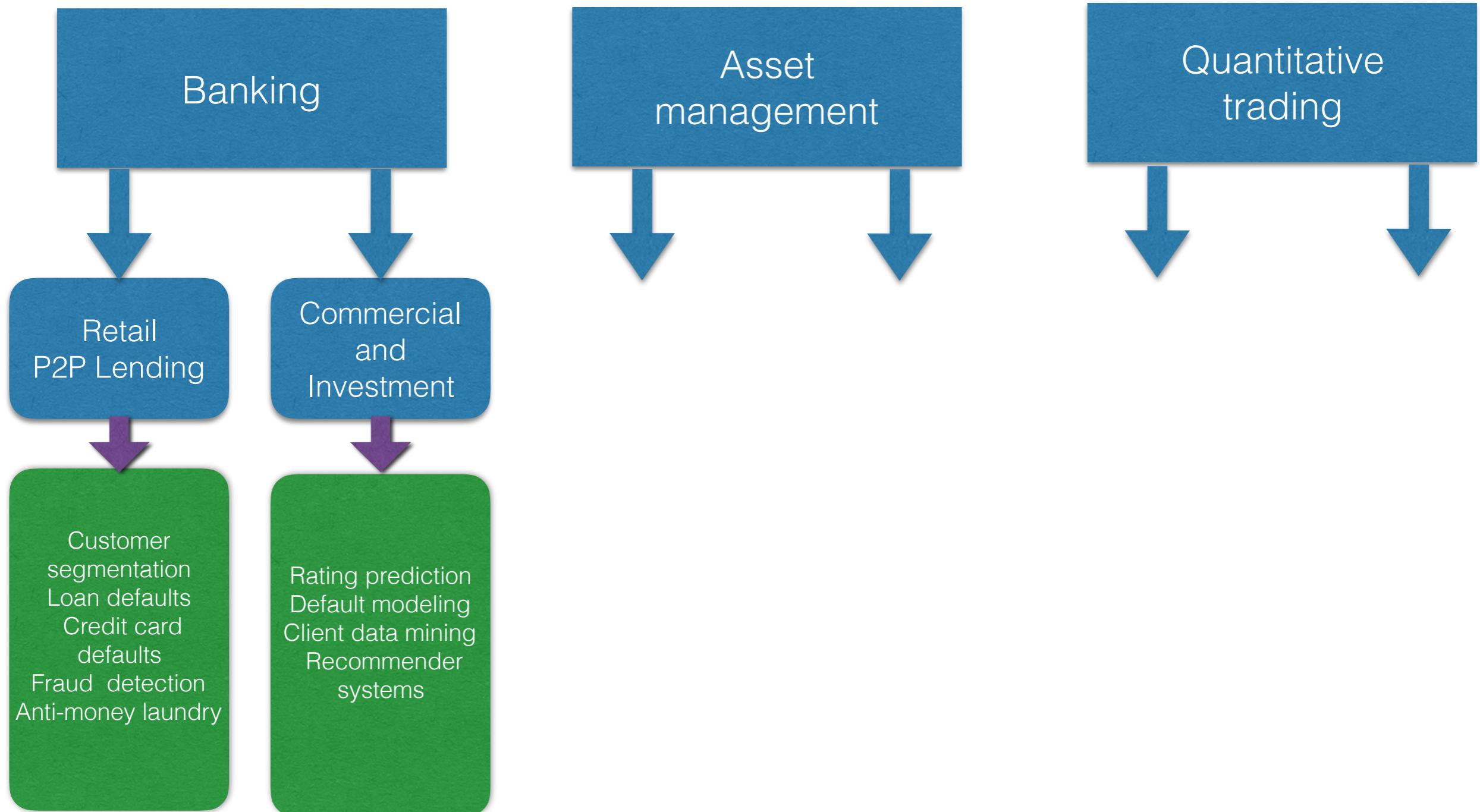
# ML by financial application areas



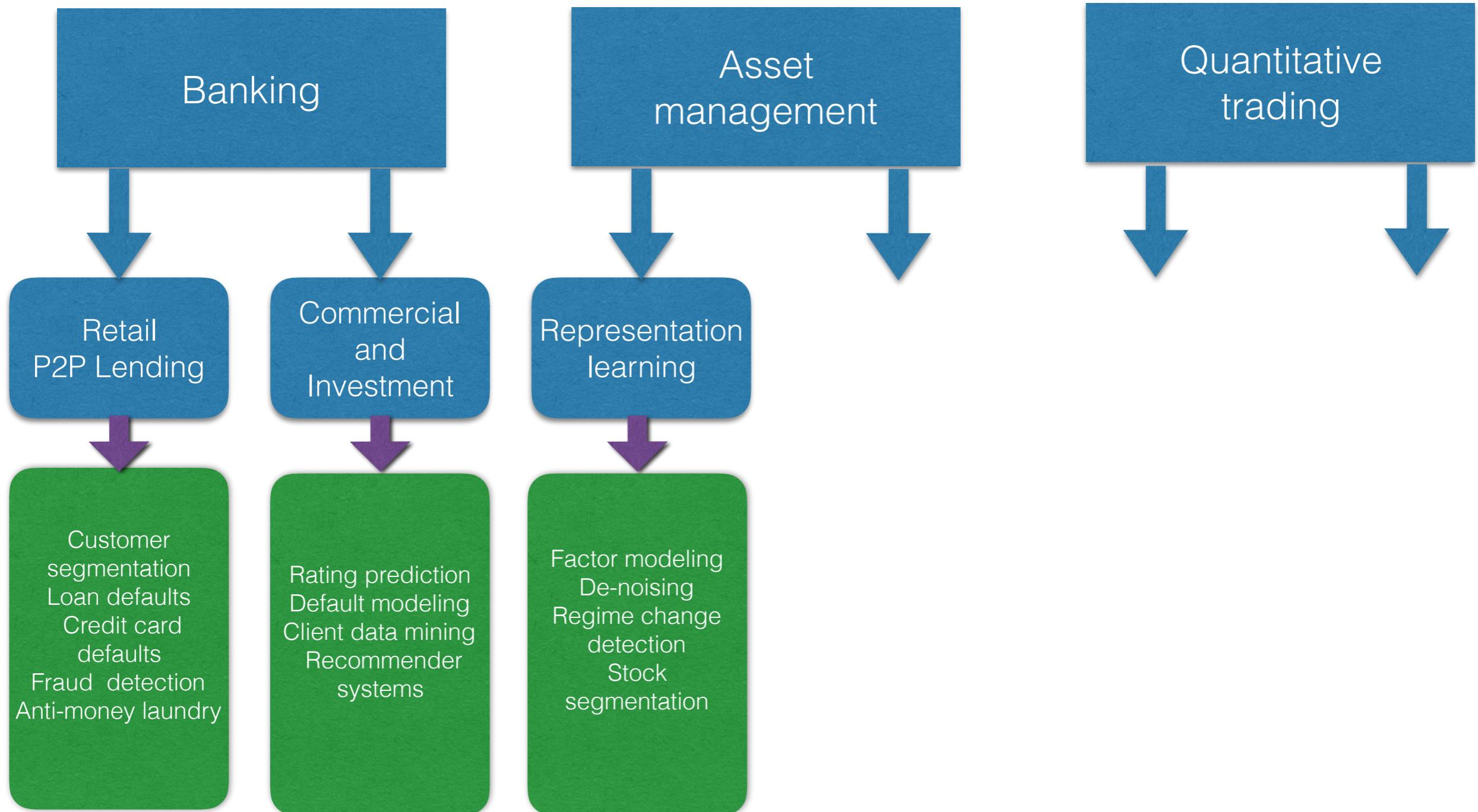
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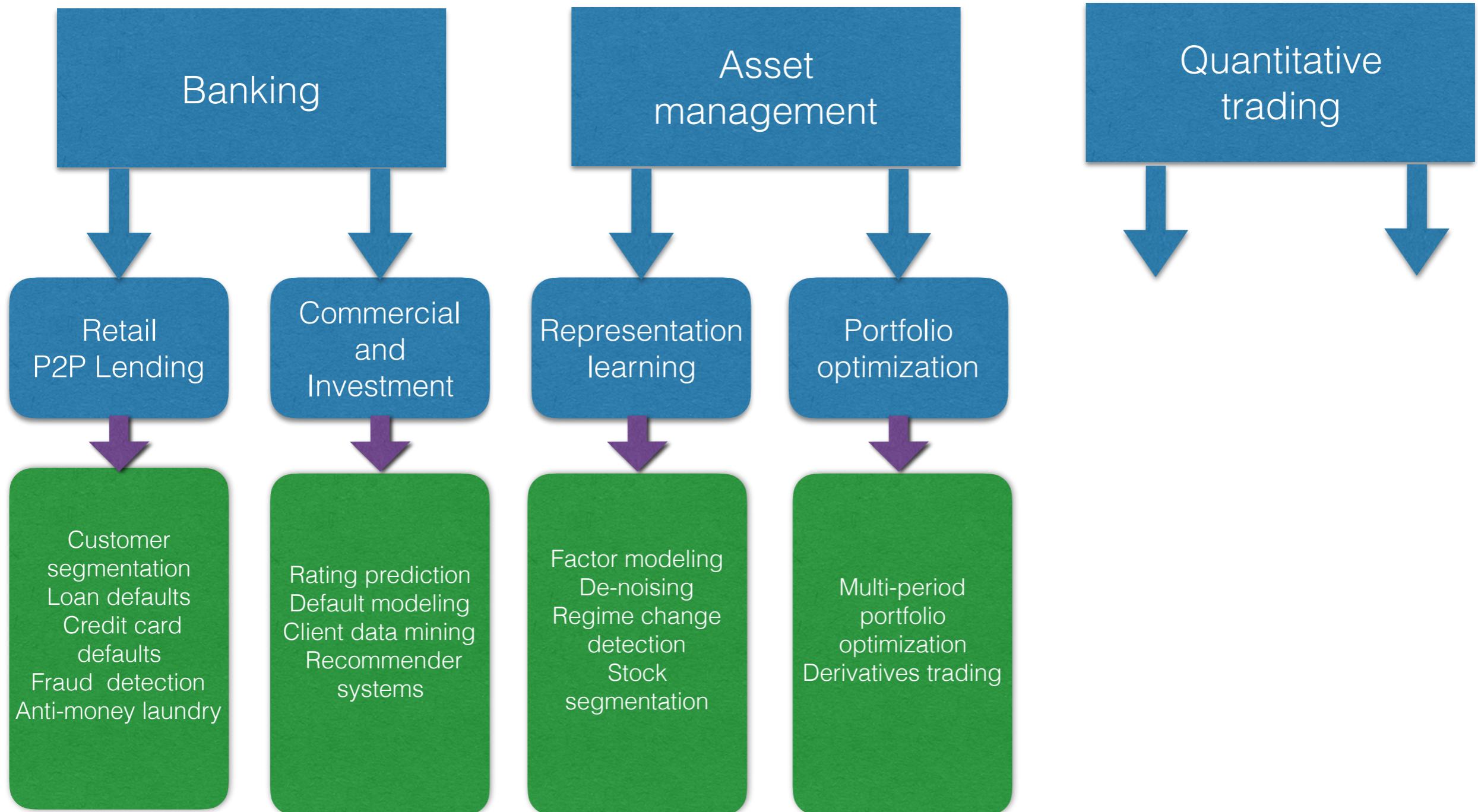
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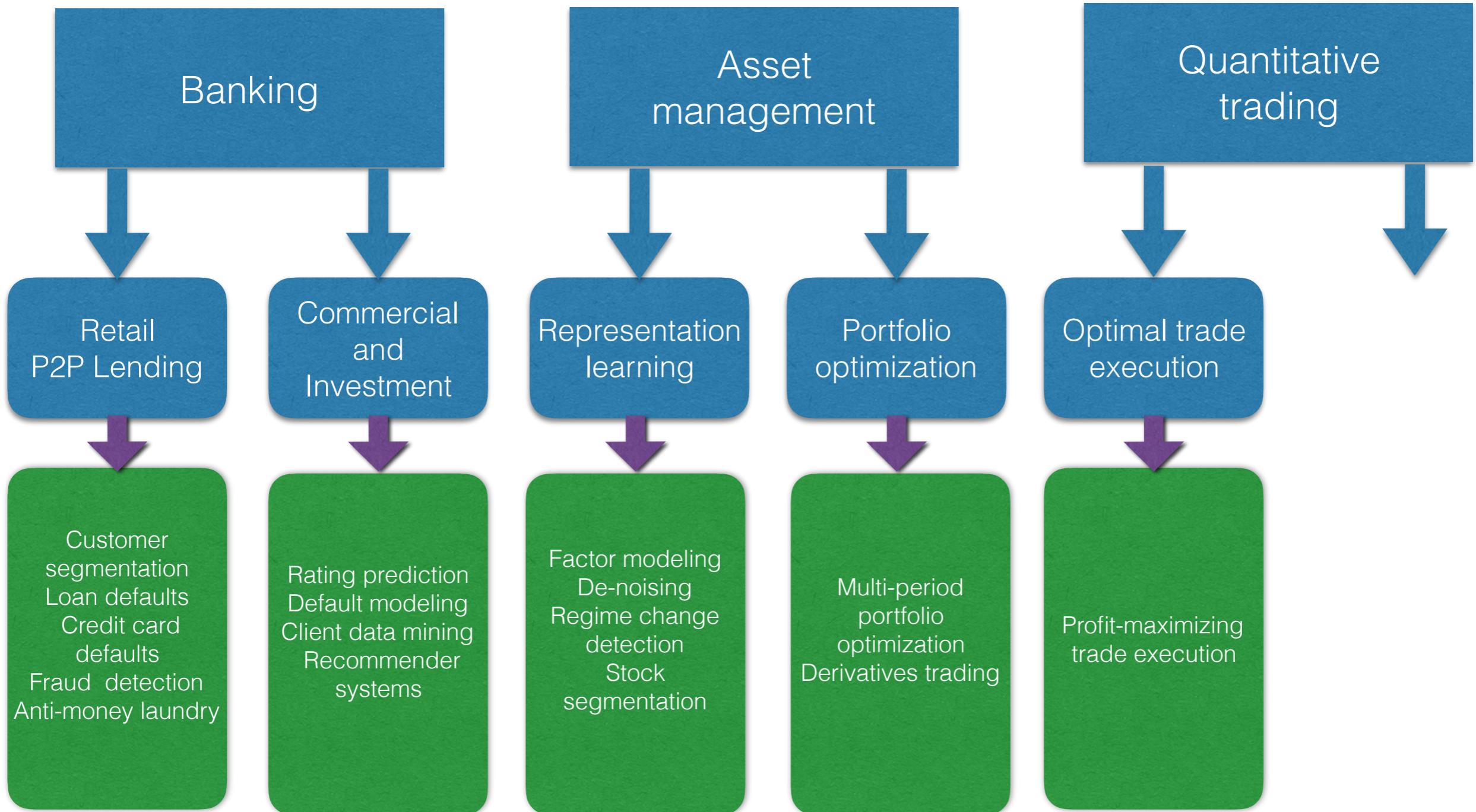
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