

# Introduction to Active Learning

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- ▶ Inefficient! This is where Active Learning comes in.

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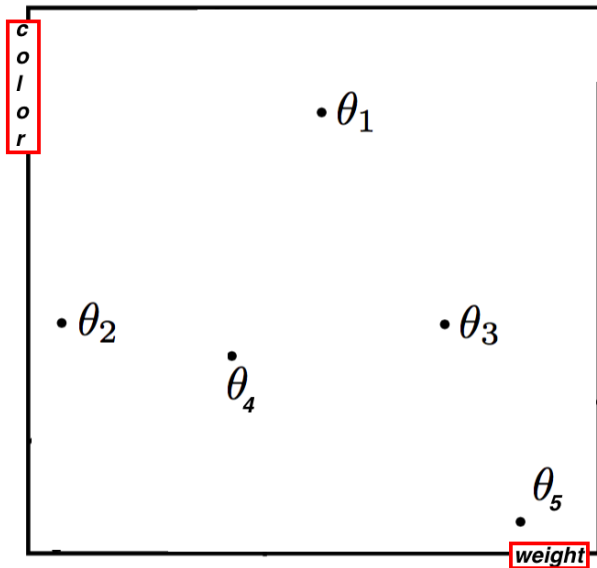
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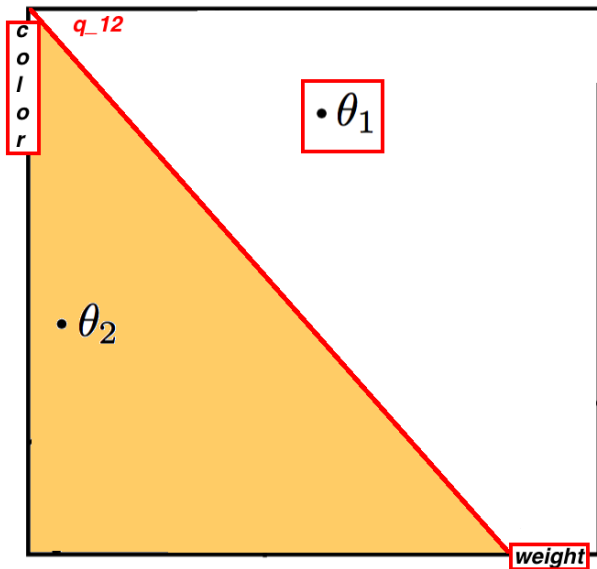
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  - ▶ A1: Embedding if  $\theta_i \prec \theta_j$  then  $\|\theta_i - r\| < \|\theta_j - r\|$ .
  - ▶ A2: Consistency Every pairwise comparison is consistent with the global ranking.

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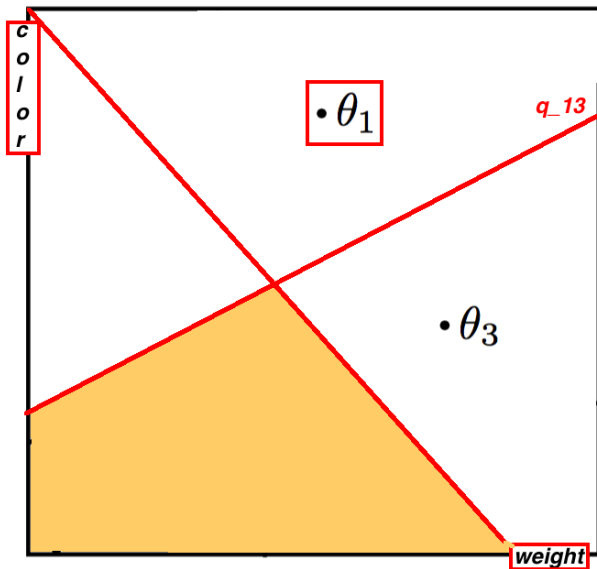




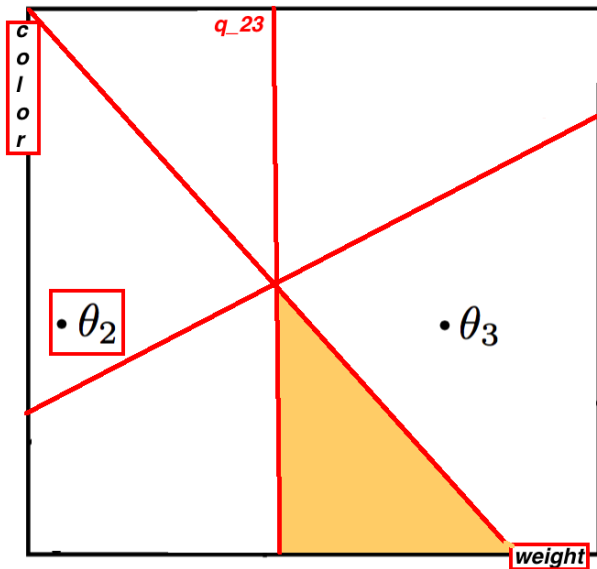
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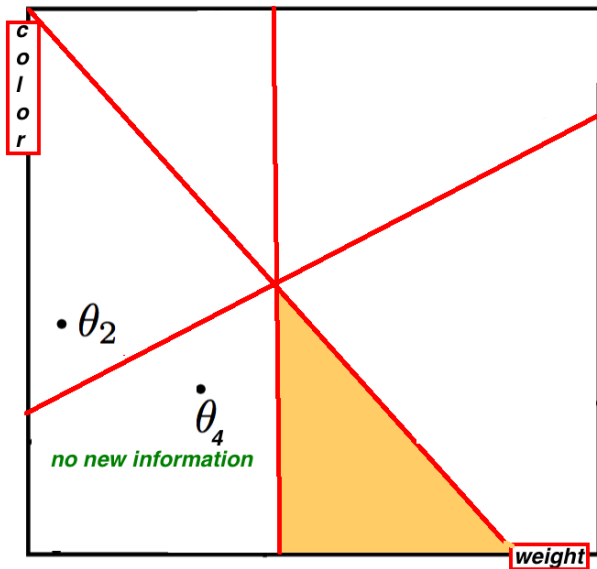
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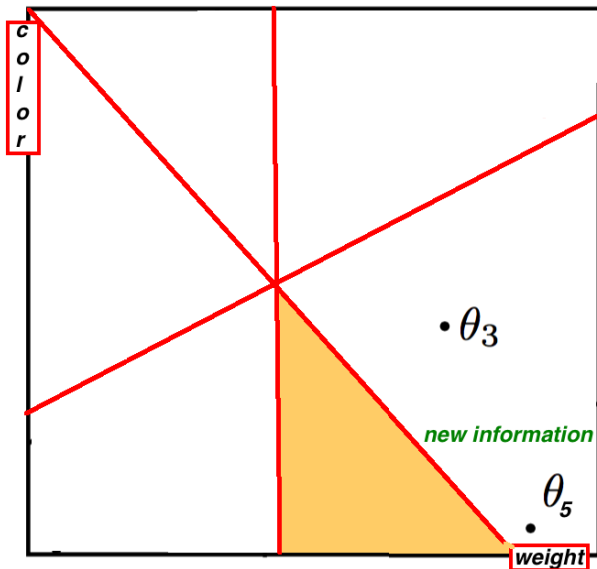
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- ▶ Generate global rankings by asking pairwise comparison queries.
- ▶ Currently using random pairwise queries.
- ▶ Opportunity for active learning algorithms.

Thanks!