

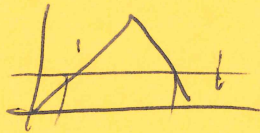
→ Definition of unknown unknown:

"An example that is classified incorrectly with high confidence"

- Tie "known unknowns" with "reject inference" (clerical review)
- Differentiate "outliers" from regular-pattern "unknown unknowns" regularity.
- Bring upon the "open world" connection (thank Eric Horvitz)
- What if the areas of "unknown unknowns" is a power-law distribution? log-normal sizes?

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- Define UU, connect with reject inference & K.U.
  - Errors in  $\hat{p}$  or  $\hat{c}$  for class membership (leave cost aside for now)
  - Evaluate classifiers based not only on generalization performance (assumes closed world), but also on  $\hat{p}$  estimates 
  - Open world: Rare? Sampling? convenience → Humans



