

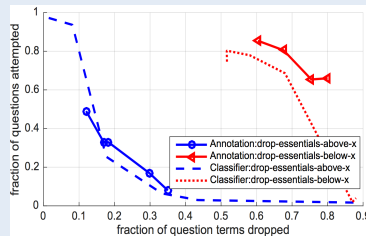
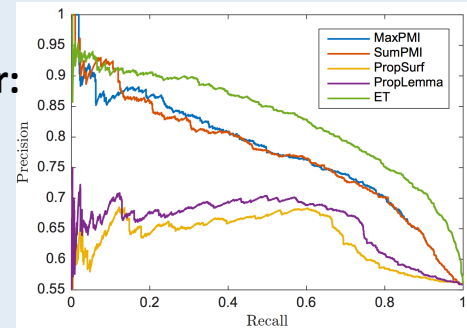
Challenge for QA systems: Is a word in a question *important, redundant, or distracting*?



An **animal** grows **thicker hair** as a season changes. This **adaptation** helps to _____. (A) find food (B) **keep warmer** (C) grow stronger (D) scape from predators

Essentiality in Questions

State-of-the-art Essentiality classifier: F1 = 0.8, MAP = 0.9



Important for humans!

Up to 5% increase in end-to-end QA performance

Dataset	Baseline	With ET
Regents	59.11	60.85
AI2Public	57.90	59.10
RegtsPertd	61.84	66.84

2K annotated questions
19K annotated terms

