

Taxonomy Exploration - Map of Mathematics

Finding Superordinate Topics in Mathematics

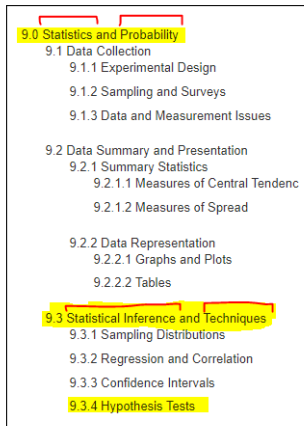
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Example Prompt & Output in *text-davinci-002*



*Mathematical topics are strongly connected, for example the hypernym of **Hypothesis Tests** is called **Statistical Inference***

$X = \text{"Hypothesis Tests"}$

$y \in Y = \{\text{"Statistical Interference", "Techniques", "Statistics", "Probability"}\}$

$$e(y, \hat{y}) = \frac{1 - \min(\text{dist}_{LV}(y, \hat{y}))}{\max(\text{len}(y), \text{len}(\hat{y}))} \text{ for } y \in Y$$

Figure: This taxonomy is based on the Math NSDL Taxonomy Committee Report, April 2, 2002



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Investigation

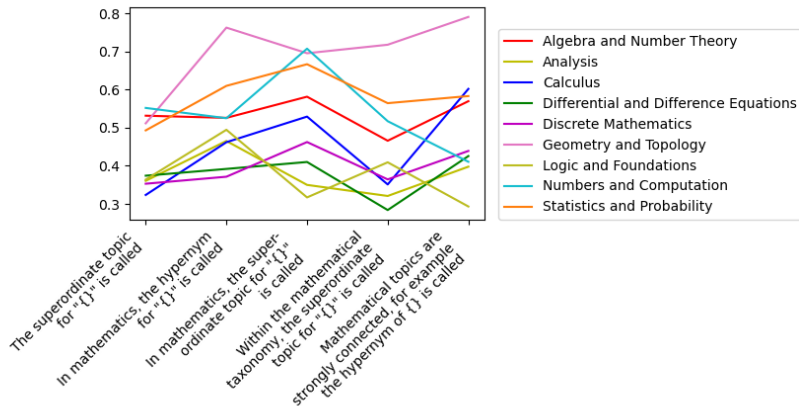


Figure: Model Performance



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