Taxonomy Exploration - Map of Mathematics Finding Superordinate Topics in Mathematics

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Example Prompt & Output in text-davinci-002

9.0 Statistics and Probability
9.1 Data Collection
9.1.1 Experimental Design
9.1.2 Sampling and Surveys
9.1.3 Data and Measurement Issues
9.2 Data Summary and Presentation
9.2.1 Summary Statistics
9.2.1.1 Measures of Central Tendenc
9.2.1.2 Measures of Spread
9.2.2 Data Representation
9.2.2 Data Representation
9.2.2 Talles

9.3 Statistical Inference and Techniques
9.3.1 Sampling Distributions

9.3.2 Regression and Correlation 9.3.3 Confidence Intervals 9.3.4 Hypothesis Tests

Figure: This taxonomy is based on the Math NSDL Taxonomy Committee Report, April 2, 2002 Mathematical topics are strongly connected, for example the hypernym of Hypothesis Tests is called Statistical Inference

X = "Hypothesis Tests" $y \in Y = \{\text{"Statistical Interference",} \\ \text{"Techniques", "Statistics", "Probability"} \}$ $s(y, \hat{y}) = 1 - \frac{\min(\text{dist}_{LV}(y, \hat{y}))}{\max(\text{len}(y), \text{len}(\hat{y}))} \text{ for } y \in Y$



Investigation

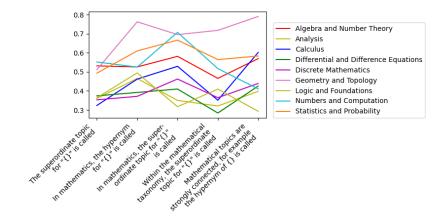


Figure: Model Performance



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