

Zero-Shot Model Performance Exploration Tests

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graph TD; A[Zero-Shot Model Performance Exploration Tests] --> B[Model Forward]; A --> C[Dataset Forward]; B --> D[1. Answer Length Analysis<br/>▶ Are LMs capable of generating long answer spans?<br/>2. Sense Exploration<br/>▶ How good are LMs at detecting senses of key entity terms?<br/>3. Architecture Examination<br/>▶ Do variations on the same architecture (small v/s large v/s distilled, etc.) have an impact on performance?<br/>▶ Are bidirectional models better at this task than autoregressive models?<br/>4. Question category analysis<br/>▶ Is there a correlation between question "type"/number of samples in that type with performance?]; C --> E[1. (Dis)similarity between datasets<br/>▶ How different are the datasets quantitatively under the Force-Directed Algorithm?<br/>2. Perplexity analysis<br/>▶ Is model performance correlated with dataset perplexity?<br/>3. Text/Task Embedding comparison<br/>▶ Does embedding the entire dataset reveal major pattern differences?];
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Model Forward

1. Answer Length Analysis

- ▶ Are LMs capable of generating long answer spans?

2. Sense Exploration

- ▶ How good are LMs at detecting senses of key entity terms?

3. Architecture Examination

- ▶ Do variations on the same architecture (small v/s large v/s distilled, etc.) have an impact on performance?
- ▶ Are bidirectional models better at this task than autoregressive models?

4. Question category analysis

- ▶ Is there a correlation between question "type"/number of samples in that type with performance?

Dataset Forward

1. (Dis)similarity between datasets

- ▶ How different are the datasets quantitatively under the Force-Directed Algorithm?

2. Perplexity analysis

- ▶ Is model performance correlated with dataset perplexity?

3. Text/Task Embedding comparison

- ▶ Does embedding the entire dataset reveal major pattern differences?