Research on High School Math Exercise Recommendation Based on Graph Neural Network

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March 23, 2021

Overview

Introduction Research Topic Research Content

Proposed Model

Result

Background

- ► Knowledge State Monitoring
- ► Learning Resource Recommendation
- ► High School Math

Problems

- ► Disorganized exercise corpus lacking knowledge tags
- ► Hard to evaluate the knowledge mastery status
- ► Difficult to find appropriate exercise for improving knowledge mastery

Core of Research

Exercise Labelling

Hard to evaluate the knowledge mastery status

Difficult to find appropriate exercise for improving knowledge mastery

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Knowledge Tagging



Knowledge Tracing

Exercise Recommendation

Block 1 content

Block 2

content

Block 3 content

Exercise Knowledge Tagging

Heading

- 1. Statement
- 2. Explanation
- 3. Example Table 1

Table

Table: Table caption

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Theorem

Theorem (Mass-energy equivalence) $E = mc^2$

Verbatim

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Example (Theorem Slide Code)

\begin{frame}
\frametitle{Theorem}
\begin{theorem}[Mass--energy equivalence]
$E = mc^2$
\end{theorem}
\end{frame}
```

Figure

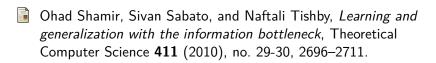
Uncomment the code on this slide to include your own image from the same directory as the template .TeX file.

Citation

An example of the \cite command to cite within the presentation:

This statement requires citation [SST10].

References I



The End