LLM-Based Mini-Lecture Generation for Enhanced Learning

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Company Background

Hi Labs Inc. is at the forefront of educational innovation as an AI-centric enterprise. Our ambition is to revolutionize the educational landscape by providing a state-of-the-art platform tailored for educators. Through this platform, teachers, professors, and other educational professionals can effortlessly design and customize virtual teaching assistants to cater to their unique needs.

Our mission extends beyond technological advancement. We aspire to leverage the power of Al to foster trusted communities that bridge students, educators, and Al-enabled educational institutions. By weaving artificial intelligence into the very fabric of learning, we aim to empower schools, universities, and educational institutes to transcend traditional barriers. Through collaboration, creativity, and cutting-edge technology, Hi Labs Inc. is committed to shaping a future where education is accessible, personalized, and inspiring.

Project description

The potential of large language models (LLMs) in education is vast and untapped. These sophisticated AI systems, skilled in understanding and generating human-like text, can be harnessed to create tailored mini-lectures that cater to individual learning needs.

In this project, students will engage in the design and development of a system that leverages the intricate capabilities of Large Language Models (LLMs) for the automatic generation of minilectures. This involves:

- Utilizing LLMs to interpret and analyze educational content, extracting key themes, concepts, and insights
- Developing algorithms that can structure these insights into concise, informative minilectures, tailored to different learning styles and levels
- Integrating NLP techniques to ensure the generated content is coherent, engaging, and pedagogically sound
- Creating an API or interface to enable seamless integration of this system into our existing platform, allowing educators to easily customize and deploy mini-lectures

Preferred skills

- JavaScript/TypeScript and Python
- NextJS
- Large language models

Preferred team size

We are looking for 4 students to work on the project.

Work location

Remote

Non-disclosure agreement (NDA) Students need to sign a simple NDA.

Ownership of work

All work done during the project will be the property of Hi Labs Inc.