

This document presents a literature review and planned research questions for the author's Ph.D. proposal. The Ph.D. proposal focusses on enhancing the performance of title and abstract selection through the application of continuous active learning in systematic reviews.

The proposal starts by motivating the need for research in this area, highlighting key stages of the systematic review process and the challenges faced. Then it outlines data sets and existing previous work with commentary on what the author feels are limitations of this research body.

The core research questions centre around how documents are represented within the CAL process and are as follows:

1. Introduce novel stopping algorithms for TAR
2. Investigate whether additional metadata, such as citation networks, can enhance model performance.
3. Evaluating the potential benefits of using decoders as embedders rather than encoders in CAL performance.

It also outlines a timeline, potential risks and mitigation strategies, ethical considerations and how the requirements for a professional development plan have been met. The author also mentions other publishable research projects with which he is involved and their potential impact on the Ph.D.