

Proposal 2

Title:

Enhancing Research Productivity through Generative AI Search Applications: An HCI Perspective

Context

In academic research, efficiently navigating and synthesizing extensive scholarly literature is essential for innovation and knowledge advancement. Traditional search methods often lack the depth and personalization required to extract nuanced insights, posing challenges to research productivity. This project aims to explore the application of Generative AI Search applications, powered by Large Language Models (LLMs), to improve the exploration and comprehension of research content. Additionally, it will examine the challenges and opportunities associated with integrating generative search applications into the research workflow.

Aim

The objective of this project is to design, develop, and evaluate a prototype system for Generative AI Search applications tailored to enhance research productivity. The thesis will also investigate how Human-Computer Interaction (HCI) principles can be applied to support end-users in understanding and effectively utilizing these Generative AI applications.

References:

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Simkute, A., Tankelevitch, L., Kewenig, V., Scott, A. E., Sellen, A., & Rintel, S. (2024). *Ironies of Generative AI: Understanding and Mitigating Productivity Loss in Human-AI Interactions*. arXiv. <https://arxiv.org/abs/2402.11364>

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