

Improving Usability of Electronic Health Records Based on Large Language Models

Against the backdrop of the digital divide, enhancing the usability of electronic health record systems for the vast number of Chinese users poses a significant challenge. This project focuses on optimizing the design and usage of Electronic Health Records through artificial intelligence technology to address the various challenges users encounter.

This project will employ empirical analysis and technical verification methods to organically integrate large language models with electronic health record (EHR) systems. This integration aims to help users quickly and accurately learn and use EHR systems, thereby improving system usability.

Job Description: We are seeking a research assistant with a solid foundation, self-motivation, and an interest in interdisciplinary research between medicine and engineering, specifically in the areas of artificial intelligence and human factors engineering. The ideal candidate should have a relevant background in artificial intelligence, human factors engineering, statistics, psychology, or related fields, and a passion for research that combines medicine and engineering. The candidate will work on literature reviews, system function design, and experimental design, closely collaborating with team members to publish related academic papers in reputable journals.

Through the Focused Research Extension Project (FREE), the candidate will have the opportunity to acquire the professional and practical skills needed for research, thereby increasing the likelihood of being accepted into doctoral or master's programs and gaining long-term employment opportunities in the industry.

Qualifications:

- Bachelor's, master's, or higher degree in human factors engineering, statistics, computer science, medical informatics, psychology, or a related field, or relevant background.
- Experience in interactive experimental design (e.g., randomized controlled trials, surveys), statistical data analysis and processing, and model building.
- Proficiency in using statistical tools (e.g., R, Python).