



HUMAN-COMPUTER INTERACTION

Spring 2025

COURSE PROJECT THEMES



# Theme 1: Physician-Patient Collaboration and Medical Decision-Making



## **Topic 1: Enhancing Physician-Patient Communication for Better Diagnostic Decisions**

The process of physician-patient communication influences final diagnostic decisions.  
How to assist physicians in gaining deeper insights into patients' psychological states to facilitate improved medical decision-making.



## Topic 2: Enhancing Patient Adherence and Recovery Through Guidance

Patients often struggle to understand complex medical plans, leading to poor adherence. How can we provide daily guidance for patients, promote the daily recovery outcomes?



## Theme 2: Controllable AIGC



## Topic 1: Enhancing the Efficiency and Controllability of Workflow Diagram Generation

Transforming ideas from the mind into high-fidelity workflow diagrams is a complex and time-consuming process. Please try to design a system that accurately captures user intent and efficiently generates workflow diagrams in a controllable manner.



## Topic 2: Enhancing the Alignment of Designer Inspiration with Generative Tool Outputs

Designers often draw inspiration from various modalities such as images, text, and colors. However, transforming these inspirations into precise design language for generative tools' prompts can be a complex and unpredictable process. Can you raise up some ideas to bridge the gap between a designer's vision and the output of generative systems, ensuring the final designs align closely with their original inspiration.





## Theme 3: Enhancing User Engagement and Experience





## Topic 1: Enhancing the Immersion and Experience of Reading Ancient Poetry

For modern people, transcending time and space to witness the scenes depicted by ancient poets in their poetry is extremely difficult, making it challenging to truly grasp the artistic conception and emotions conveyed in the poems. Find ways to enhance the immersion and experiential quality of the poetry-reading process.





## Topic 2: Enhancing the Immersion and Multi-Perspective Exploration of Outdoor Route Planning

In outdoor travel route planning, existing maps and plans are limited to 2D navigation. How can we enhance the immersion of this process, facilitate multi-perspective exploration, and improve the overall experience?



## Theme 4: Mental Health and Social Factors



## Topic 1: Stress Interview Adaptability Training

Traditional job interviews has psychological pressure of being observed or scrutinized by others. How can we facilitate this process to enhance users' adaptability during these pressure testing scenarios?



## Topic 2: Enhancing Thought Training Through Guided Process

In certain scenarios, such as diagnosis, cognitive training is essential. Guiding users through a thought process rather than directly providing answers can significantly enhance their training outcomes. How can this process be supported?