Problem

Surrogates are a key part of Web search. Users rely on them to assess relevance and improve their searches. But existing surrogates contain so little information that they fail to support accurate relevance judgments in many cases. (In our previous study, users’ judgments using Google surrogates were no better than chance).

Can we develop user-centered surrogates that incorporate more information, and enable better relevance judgments, without overwhelming users?

Design. Two-condition, within-subjects experiment, counterbalanced across conditions and task sets.

Conditions: Web search results with minimal surrogates vs. results with enhanced (complex) surrogates.

Users: “Health information users.” Intelligent, motivated, but not domain experts.

Tasks: Find information on National Institute for Environmental Health Sciences Website.

Measures: Time-on-task, subjective workload (NASA TLX), secondary-task reaction time, attitudes.

Results and impact:
» empirical basis for the design of surrogates and search results interfaces
» improved understanding of how different measures of cognitive load compare