High-Stakes Information Retrieval

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CS 848-002: Advanced Topics in Databases
Mondays, 2:00 – 4:50 PM, DC 2585
High-Stakes Information Retrieval

How to meet a critical information need

All relevant evidence in a legal proceeding
All studies evaluating a medical treatment in evidence-based medicine
All phishing attacks in email security

Challenges to be addressed

What does it mean to meet the information need?
What technological and human strategies best meet the need?
What experiments can measure how well and how reliably the need is met by a particular strategy?

Publish the results!
Transfer the results to practice!
Identify new challenges, better strategies; repeat!
High-Stakes Information Retrieval

Ongoing class assignment

Perform a high-stakes retrieval task, and evaluate the outcome

Lectures

Foundations of IR
High-Stakes IR Applications
Research methods for IR evaluation

Assigned readings from research literature
Student presentations (and discussions)

Independent research project
Written submission in format suitable for publication