

Query Likelihood Retrieval Model

Query Doc Rel

q **d** **R**

q1 d1 1

q1 d2 1

q1 d3 0

q1 d4 0

q1 d5 1

...

q1 d1 0

q1 d2 1

q1 d3 0

q2 d3 1

q3 d1 1

q4 d2 1

q4 d3 0

$$f(q,d)=p(R=1 \mid d,q) \approx$$

User likes d

$$p(q \mid d, R=1)$$

How likely the user enters q

Assumption:

A user formulates a query based on an
“imaginary relevant document”