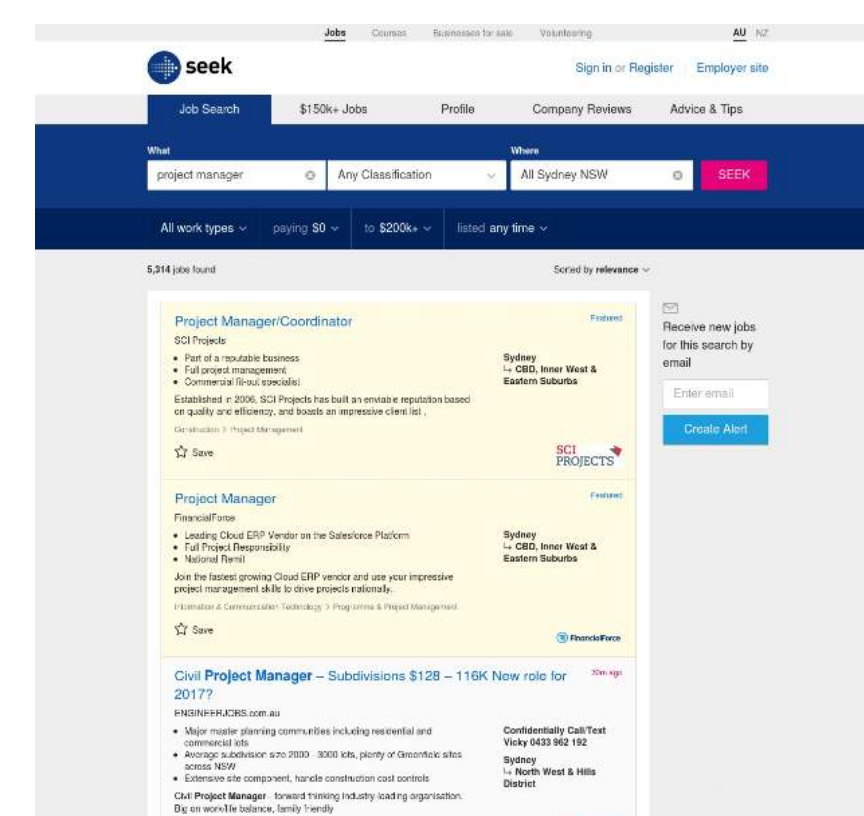


Understanding User Behavior in Job and Talent Search: An Initial Investigation

Damiano Spina, Maria Maistro, Yongli Ren, Sargol Sadeghi, Wilson Wong, Timothy Baldwin, Lawrence Cavedon, Alistair Moffat, Mark Sanderson, Falk Scholer, Justin Zobel

1. Search Tasks

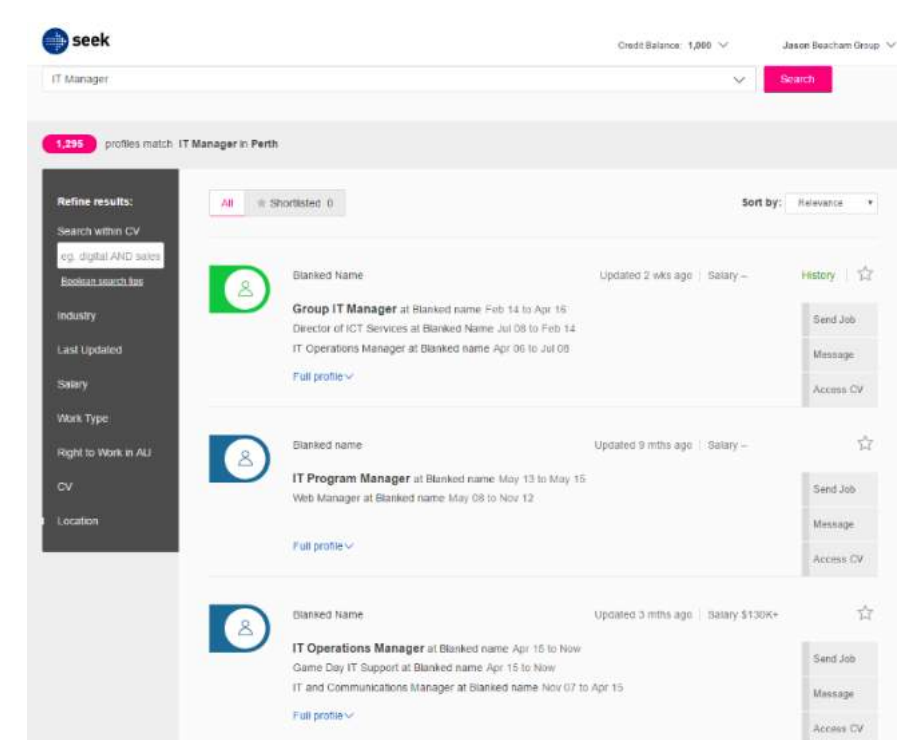
Job Search



Individuals monitor for opportunities / seek fresh employment in roles for which they have skills and experience.

Talent Search

Companies or employers seek candidates suitable for an available position within a business.

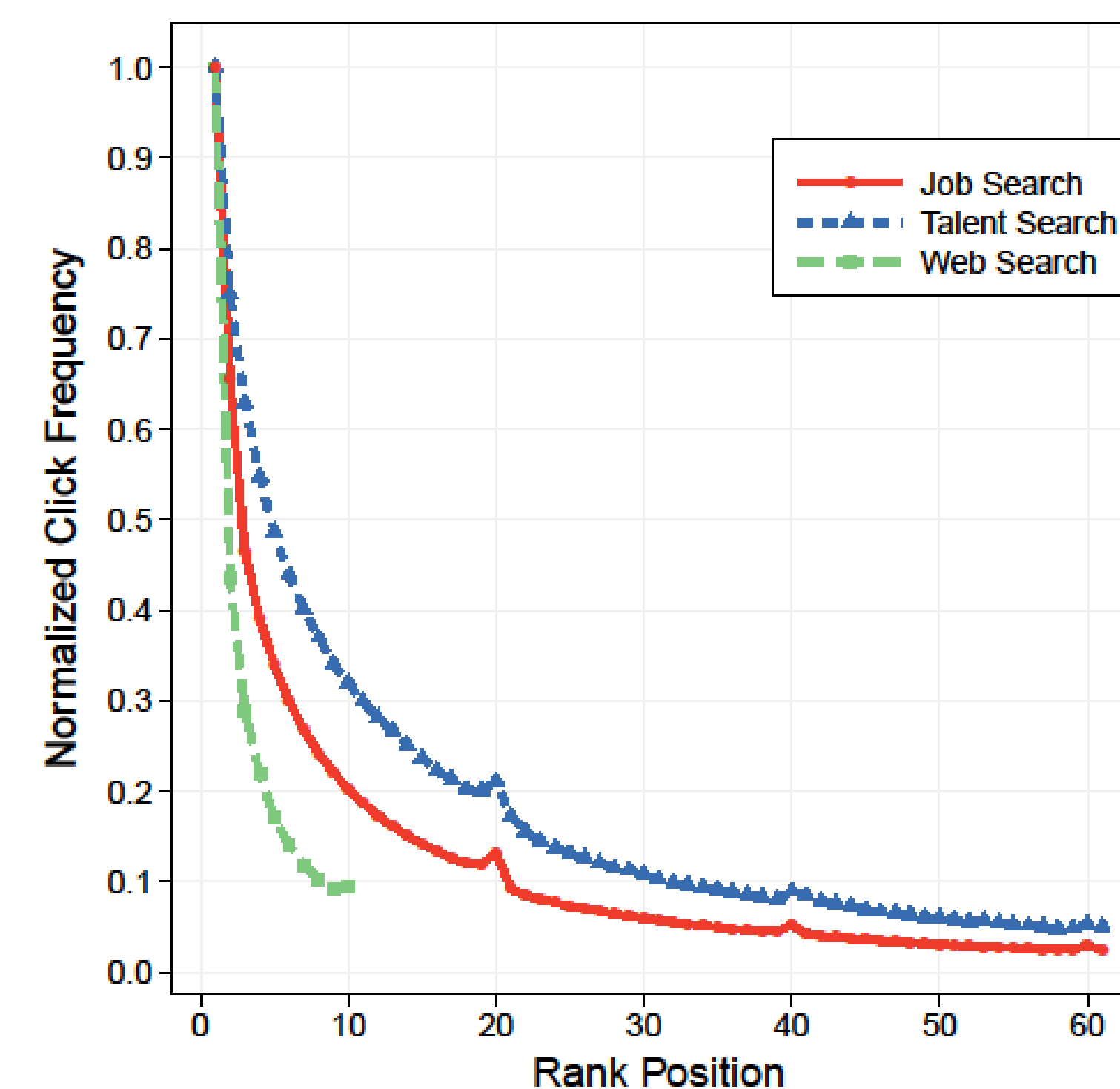


2. Datasets

Web Search. Yandex logs, Relevance Prediction Challenge: 5.2k queries, top 10 results.

Job and Talent Search. SEEK logs: sample of 140M searches by seekers, 1.2M searches by hirers, top 20 results.

3. Web vs. Job vs. Talent Search



Job and Talent Search seem to be **more recall-oriented** than Web Search.

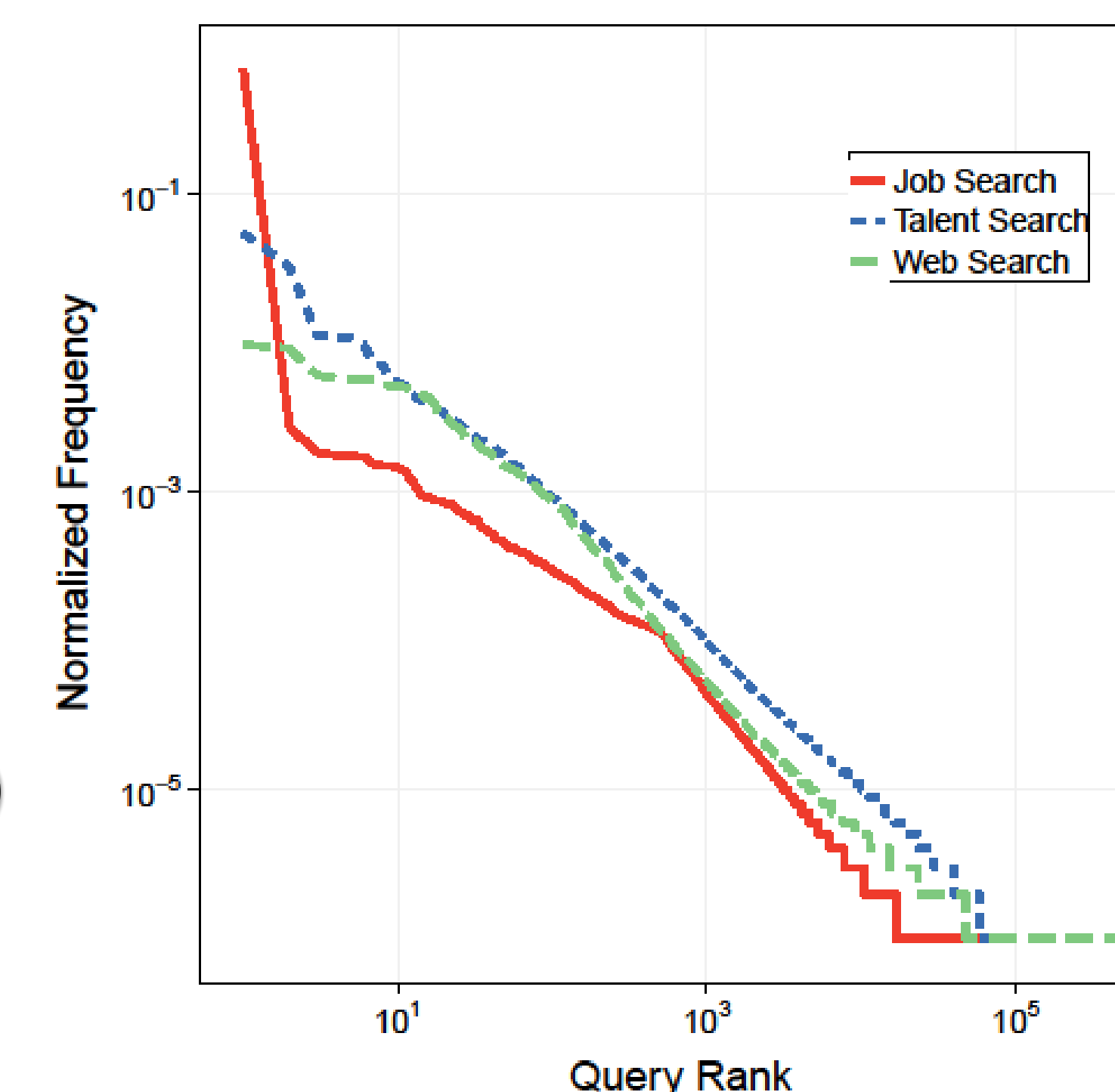
- High cost of missing out on a dream job or a talented candidate.

Queries submitted by users are substantially **less diverse** in job and talent search than in web search.

- Job-related (domain-specific) vs. web (domain-general) search.

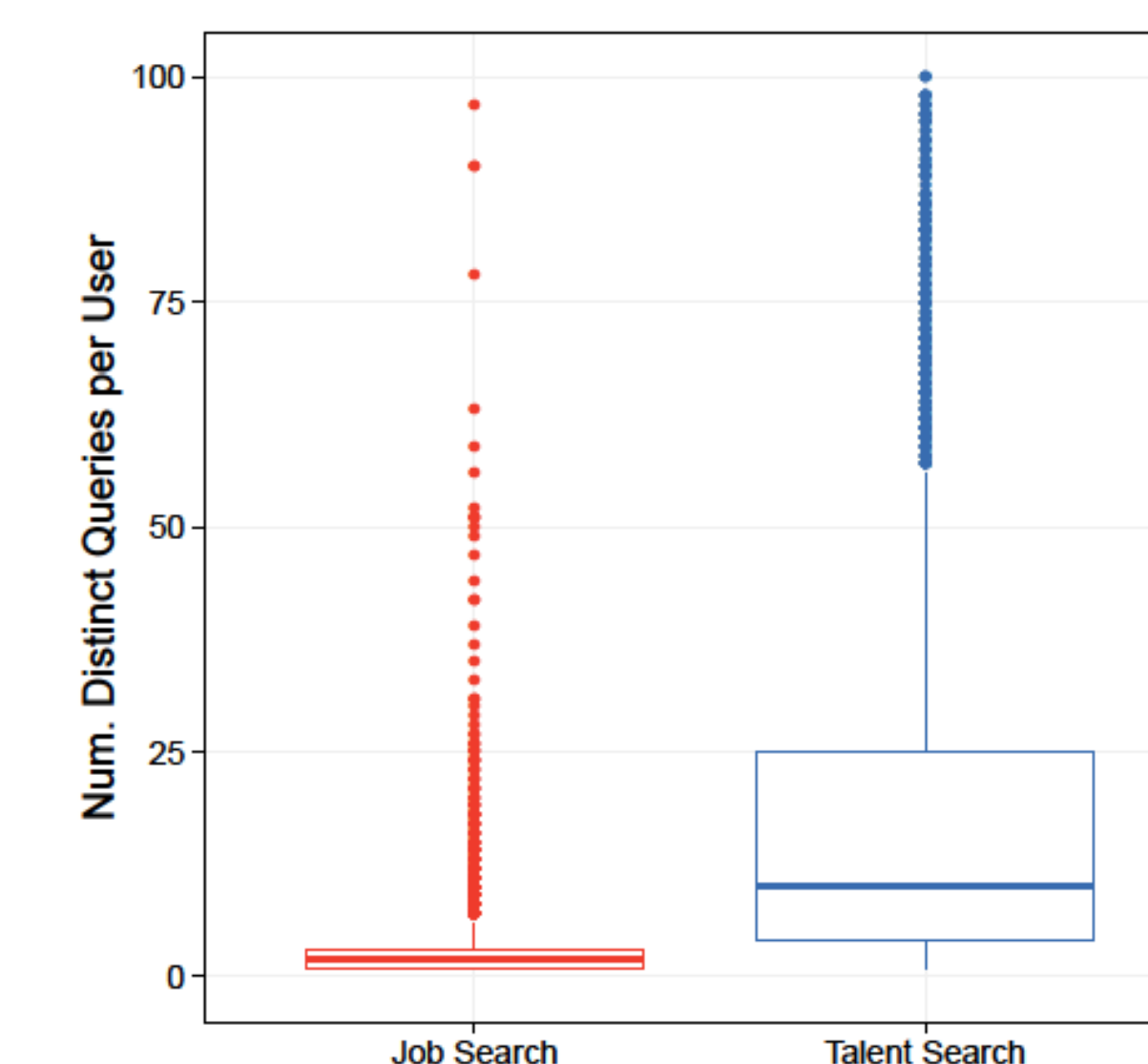
Job search has 15% fewer number of distinct queries than web search.

Talent search has 20% fewer number of distinct queries than web search.



4. Job vs. Talent Search

Hirers submits **more distinct queries** than seekers.



- 50% of hirers submit more than 10 unique queries.

5. Challenges

- Are **click models** used for web search applicable to job search?
- Do **click-biases** observed in web search also occur in job search?
- How can **user behavior and user satisfaction** be modelled from analyzing interactions in job search logs?
- How should **evaluation** of job search be performed?

