

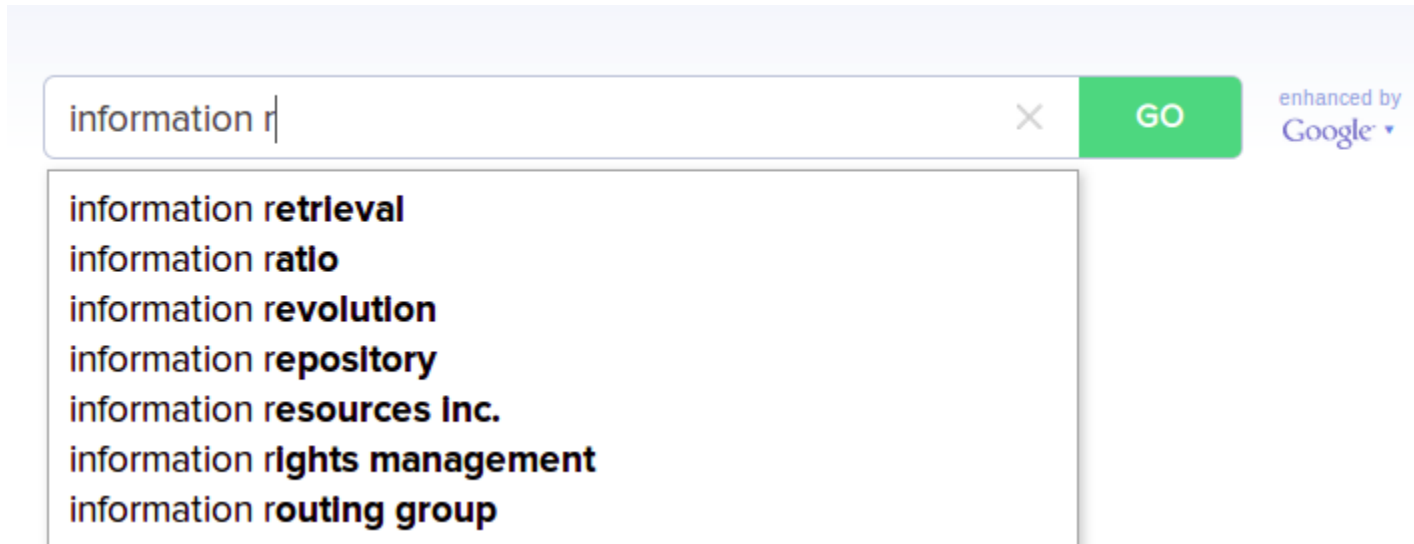
Error-tolerant Query Autocompletion

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Problem Description

- Predicts the rest of a query that a user is typing



A screenshot of a search interface. At the top, a search bar contains the text "information r". To the right of the search bar is a green "GO" button and a small text "enhanced by Google". Below the search bar, a dropdown menu displays a list of autocomplete suggestions. Each suggestion is a phrase starting with "information" followed by a word in bold. The suggestions are: "information **retrleval**", "information **ratio**", "information **revolution**", "information **repository**", "information **resources Inc.**", "information **rights management**", and "information **routing group**".

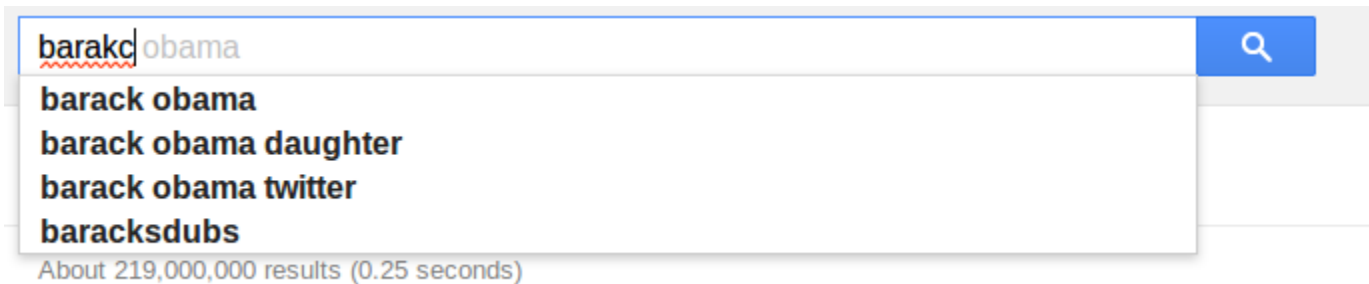
information r

GO enhanced by Google

- information **retrleval**
- information **ratio**
- information **revolution**
- information **repository**
- information **resources Inc.**
- information **rights management**
- information **routing group**

Problem Description

- Minor typing errors should be ignored



Motivation

- help user to reformulate her query
- predict the query
- save time

Methodology

- Proposed solutions in [1] | [2]
 - When user types a query, its variations are find from Trie (index) using edit distance
- Efficiency improvements

References

- [1]C. Xiao, J. Qin, W. Wang, Y. Ishikawa, K. Tsuda and K. Sadakane, 'Efficient error-tolerant query autocompletion', Proceedings of the VLDB Endowment, vol. 6, no. 6, pp. 373-384, 2013.
- [2]S. Chaudhuri and R. Kaushik, 'Extending autocompletion to tolerate errors', Proceedings of the 35th SIGMOD international conference on Management of data - SIGMOD '09, 2009.
- [3]Z. Bar-Yossef and N. Kraus, 'Context-sensitive query auto-completion', Proceedings of the 20th international conference on World wide web - WWW '11, 2011.