# **Distant Authorities**

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## Research topic

- Motivation
  - Information drift over distance
- Subject
  - Distance from recommendation vs probability of acting on recommendation
- Problem Parameters
  - Yelp dataset
  - Reference posts
  - Distribution of visits

## Overview

### Methods

- Reference posts: classifiers<sup>1</sup>
  - Trainer: "Local experts"<sup>2</sup>
  - Comparison set: "Elite" reviews1
- Distribution
  - Effective closeness<sup>3</sup>
  - Actual distance<sup>4</sup>
- Correlation
  - Control set
  - Data aggregation

## Progress

- Development environment
  - Drill
  - Python
  - Restricted dataset (Montreal restaurants)
- Reference posts
  - Trainer set
  - Evaluation set

#### References

- 1. Jindal, Tanvi. "Finding Local Experts from Yelp Dataset." Diss. U of Illinois at Urbana-Champaign, 2015. IDEALS @ Illinois. 27 Apr. 2015. Web.
- 2. López, Claudia, and Rosta Farzan. "Analysis of Local Online Review Systems as Digital Word-of-mouth." Proceedings of the 23rd International Conference on World Wide Web WWW '14 Companion (2014). Web. (link: http://dl.acm.org/citation.cfm?id=2576933)
- 3. Kang, U., Spiros Papadimitriou, Jimeng Sun, and Hanghang Tong. "Centralities in Large Networks: Algorithms and Observations." Proceedings of the 2011 SIAM International Conference on Data Mining(2011): 119-30. Web. (link: http://www.cs.cmu.edu/~ukang/papers/CentralitySDM2011.pdf)
- 4. Akiba, Takuya, Yoichi Iwata, and Yuichi Yoshida. "Fast Exact Shortest-path Distance Queries on Large Networks by Pruned Landmark Labeling." Proceedings of the 2013 International Conference on Management of Data SIGMOD '13 (2013)