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# Recommendation System for Airbnb listings

Ioannis Petromichelakis

*Applicant for The Data Incubator Fellowship program*

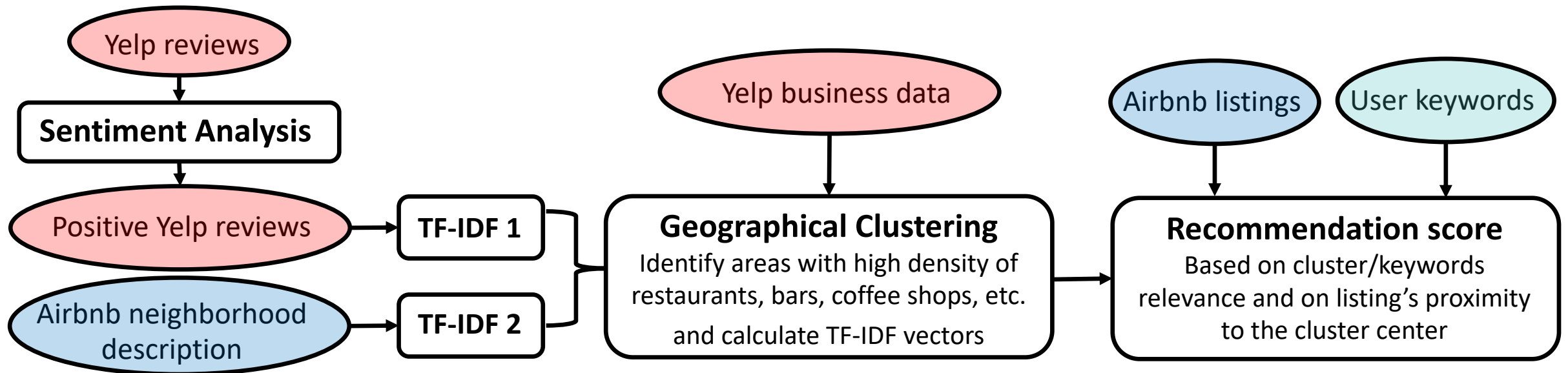
# Outline

## Motivation, assumptions and objectives

- Yelp Challenge Dataset (5.5GB) from yelp.com
- Airbnb Listings in Toronto and Montreal (200MB) from insideairbnb.com

## Data:

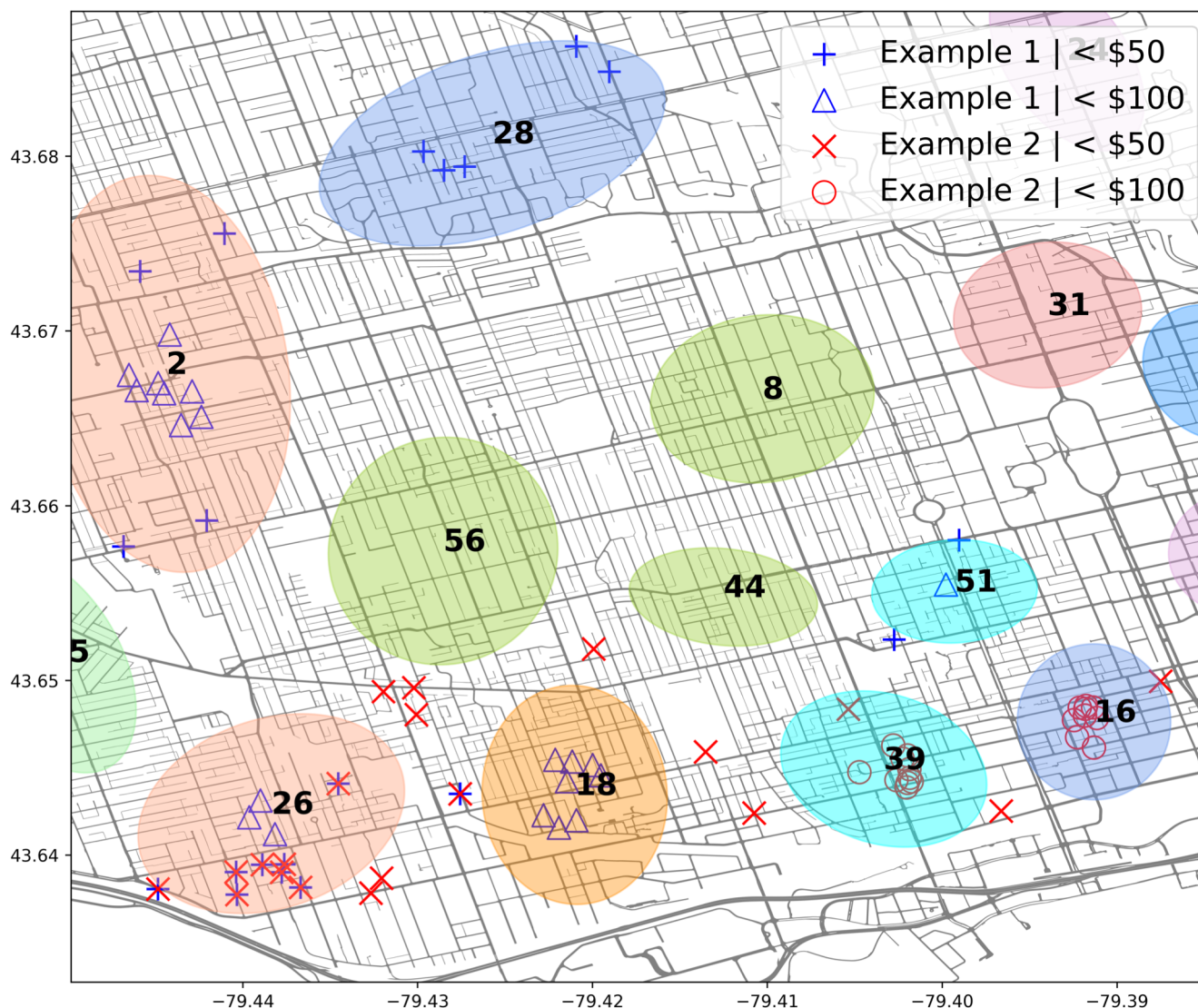
- Yelp Challenge Dataset (5.5GB) from yelp.com
- Airbnb Listings in Toronto and Montreal (200MB) from insideairbnb.com



# Results - Toronto

Example 1: 'hipster', 'hippy, art,...

Example 2: clubs, nightlife,...

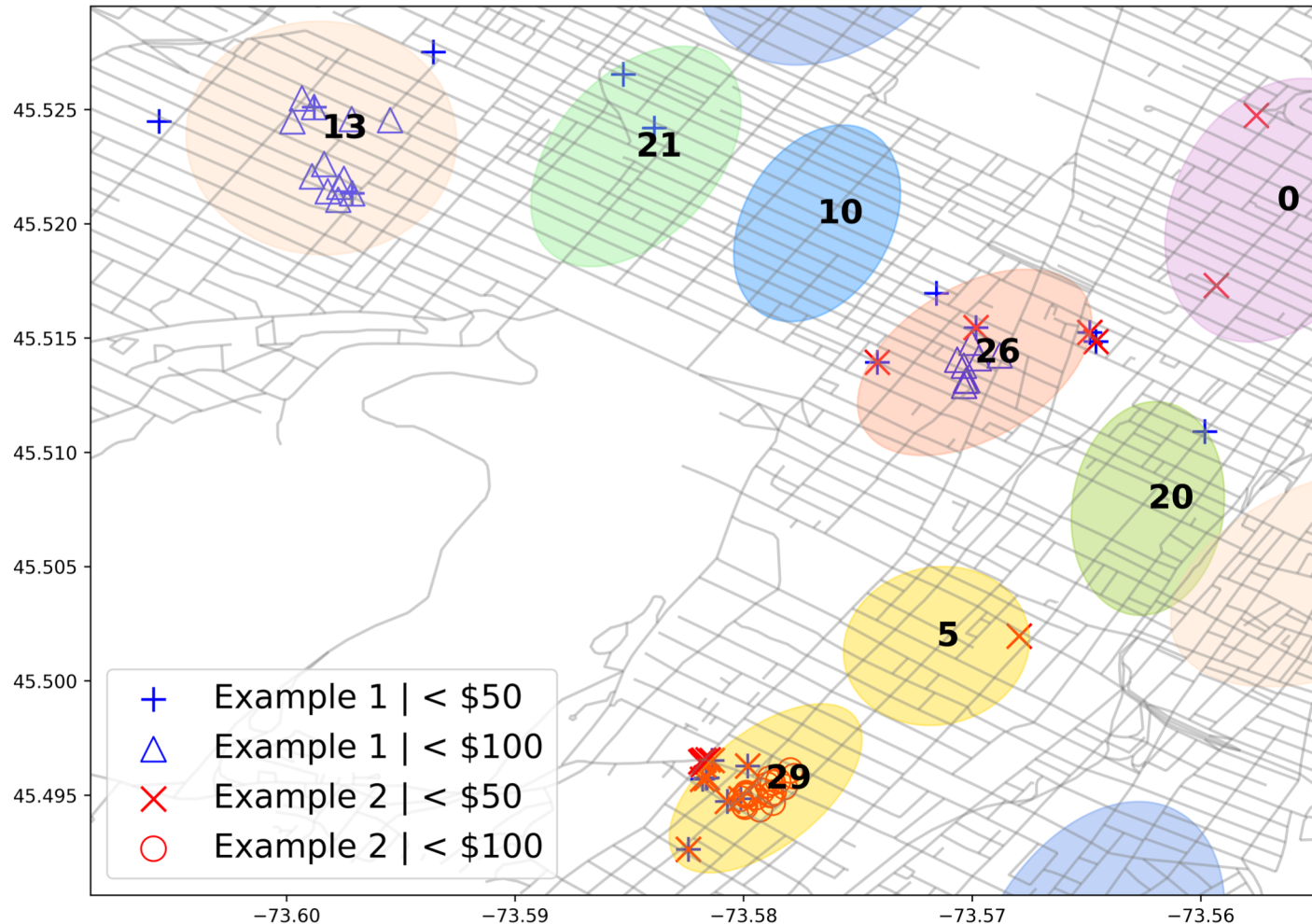


| Cluster | Scr 1      | Scr 2      | # listings | Av. Price | Neighborhoods   |
|---------|------------|------------|------------|-----------|---|
| 2       | <u>6.6</u> | 2.3        | 279        | \$101.33  | Dovercourt-Junction 69%<br>Corso Italia-Davenport 21%         |
| 16      | 2.8        | <u>5.0</u> | 794        | \$204.44  | Waterfront Communities 94%                                    |
| 18      | <u>6.8</u> | <u>3.8</u> | 487        | \$177.35  | Little Portugal 37%<br>Niagara 33%<br>Trinity-Bellwoods 19%   |
| 26      | <u>6.1</u> | <u>4.2</u> | 319        | \$125.96  | Roncesvalles 40%<br>South Parkdale 38%<br>Little Portugal 18% |
| 28      | <u>4.1</u> | 1.6        | 125        | \$119.88  | Wychwood 53%<br>Humewood-Cedarvale 22%                        |
| 39      | 3.5        | <u>5.1</u> | 769        | \$199.43  | Waterfront Communities 68%<br>Niagara 20%                     |
| 44      | 3.1        | <u>3.7</u> | 174        | \$141.52  | Trinity-Bellwoods 53%<br>Palmerston-Little Italy 38%          |
| 51      | <u>6.4</u> | 1.9        | 250        | \$122.03  | Kensington-Chinatown 98%                                      |

# Results - Montreal

Example 1: hipster, hippy, art,...

Example 2: clubs, nightlife,...



| Cluster | Scr 1       | Scr 2      | # listings | Av. price | Neighborhood |      |
|---------|-------------|------------|------------|-----------|--------------|------|
| 0       | 4.5         | <u>7.4</u> | 787        | \$109.20  | Ville-Marie  | 100% |
| 5       | 5.8         | <u>8.8</u> | 325        | \$186.20  | Ville-Marie  | 76%  |
|         |             |            |            |           | Le Plateau   | 24%  |
| 13      | <u>10.3</u> | 5.3        | 603        | \$122.17  | Le Plateau   | 77%  |
|         |             |            |            |           | Outremont    | 14%  |
| 20      | <u>8.0</u>  | 6.4        | 453        | \$158.07  | Ville-Marie  | 100% |
| 21      | <u>6.6</u>  | 5.5        | 691        | \$115.44  | Le Plateau   | 99%  |
| 25      | 5.3         | <u>7.0</u> | 420        | \$187.64  | Ville-Marie  | 98%  |
| 26      | <u>8.3</u>  | <u>8.2</u> | 823        | \$159.81  | Le Plateau   | 70%  |
|         |             |            |            |           | Ville-Marie  | 30%  |
| 29      | <u>6.4</u>  | <u>9.3</u> | 728        | \$125.02  | Ville-Marie  | 99%  |

# Outline

