Who to query? A two step querying technique for tracking real-time variant/unknown event distributions

Mai ElSherief
Dept. of Computer Science
UC Santa Barbara
mayelsherif@cs.ucsb.edu

ABSTRACT

Some abstract sentences...

1. INTRODUCTION

Some introductory sentences...

2. RELATED WORK

- Spatial task distribution (maximizing task assignement)
- Applications: emergency scenarios, safety applications, etc.

3. RESEARCH QUESTION AND PROPOSED TECHNIQUE

Given N resources, who should you select to track a realtime phenomenon? The answer is that you want to select users with the same distribution as the phenomenon. But what if you do not know the distribution or What if the distribution of the phenomenon is time variant? [1]

4. EXPERMIENTS

4.1 Clustered data experminets

- Begin by pointing out real-life examples of spatially clustered phenomenon and spatial correlation in general.
- 4.2 Uniformly distributed data experminets
- 4.3 Case Study: Hollaback harassment data set
- 4.4 Stressing the two stage querying technique (k=1)

5. DISCUSSION

- Our assumptions and limitations...

6. CONCLUSIONS

In this paper, we introduced....

Elizabeth Belding
Dept. of Computer Science
UC Santa Barbara
ebelding@cs.ucsb.edu

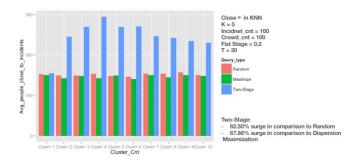


Figure 1: Average number of people close to the incidents when maximizing the dispersion with 20% of available resources.

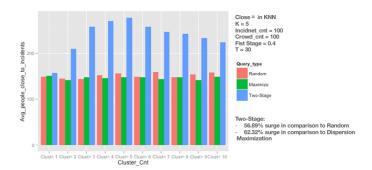


Figure 2: Average number of people close to the incidents when maximizing the dispersion with 40% of available resources.

7. ACKNOWLEDGMENTS

8. REFERENCES

[1] D. Van Dyck, G. Cardon, B. Deforche, and I. De Bourdeaudhuij. Do adults like living in high-walkable neighborhoods? Associations of walkability parameters with neighborhood satisfaction and possible mediators. *Health & Place*, 17(4):971–977, 2011.

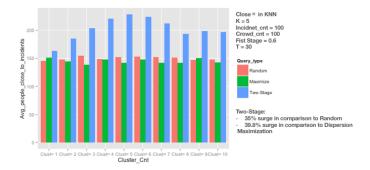


Figure 3: Average number of people close to the incidents when maximizing the dispersion with 60% of available resources.

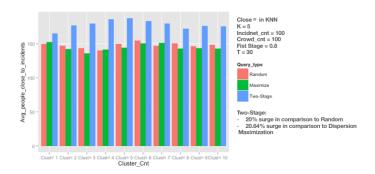


Figure 4: Average number of people close to the incidents when maximizing the dispersion with 80% of available resources.

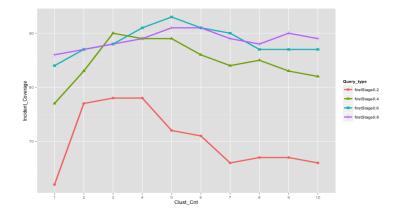


Figure 5: Number of incidents covered by variations of the two-stage querying technique.