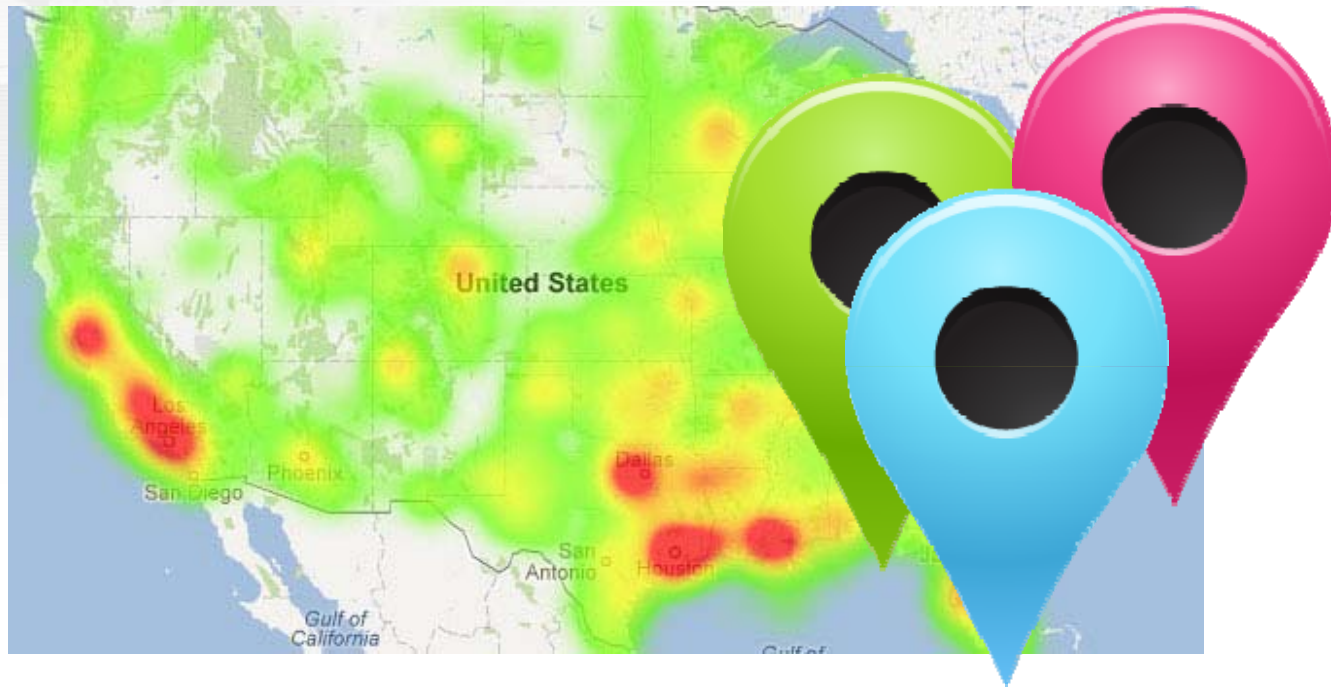


“Hey, I am Watching U !”

— Modeling and Visualizing Regular
Tweeting Pattern of Purdue Campus

YUKI HUANG

How to find out a user's pattern?



Behavior Probability

*Probability = Spatial Probability * Temporal Probability*

$$= \frac{\text{No. of Points in a Cluster}}{\text{No. of Points in the Period}} * \frac{\text{End Time} - \text{Start Time}}{\text{Duration}}$$

Clustering Method: Density-based spatial clustering of applications with noise (**DBSCAN**)

Web Map



🔗 JavaScript

- DBSCAN Lib
- Google Map API
- ArcGIS API
- CanvasJS

🔗 PHP

🔗 MySQL



Live Demo

<http://purduetweets.azurewebsites.net/>

Conclusion

Thinking



- ⌘ Detect and Describe Potential Patterns
 - ⌘ Change Detection
 - ⌘ Highly Diversified Crowd Data
-



Reference

Qunying Huang & David W. S. Wong (2015): Modeling and Visualizing Regular Human Mobility Patterns with Uncertainty: An Example Using Twitter Data, Annals of the Association of American Geographers, DOI: 10.1080/00045608.2015.1081120



Thank you.