Summary for Spring 2014
Mining Sequential Movement Patterns

- Semantic trajectory: places have semantics (e.g., category).

- Splitter: a two-step mining framework
  - Step 1: mining coarse pattern and snippets.
  - Step 2: splitting each coarse pattern into fine-grained ones.
Top-K Search for Random Walk with Restart

• Applications
  ‣ Query expansion
  ‣ Urban planning
  ‣ Targeted advertising

• Developed two methods that outperform existing solutions by orders of magnitude in efficiency.
Other Activities

• Research Projects for CS 512
  ‣ Mining statistically significant trajectory patterns.
  ‣ Annotating GPS trajectories with semantics.
  ‣ Finding circles in social media sites.

• Review service for KDD and others.